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CONTRIBUTORS

John Aulde, M. D., Philadelphia, Pa.
M. A. Blanton, B. S., M. D., Baileyton, Tenn.
C. E. Boynton, B. S., M. D., Smithfield, Utah.
Ben. H. Brodnax, M. D., Brodnax, La.
G. G. Burdick, M. D., Chicago, Ill.
J. A. Burnett, M. D., Little Rock, Ark.
J. J. Caldwell, M. D., Summit, N. J.
F. F. Casseday, Ph.B , M. D., Rosemount, Minn.
J. A. DeArmand, M. D., Davenport, Iowa.
F. C. Drenning, M. D., Duluth, Minn.
S. E. Fowler, M. D., Kansas City, Mo.
F. C. Gay, M. D., Brooklyn, N. Y.
H. Gasser, M. D., Plattesville, Wis.
H. A. Giltner, M. D., Chelsea, Ind.
Wm. P. Hough, M. D., Columbia, La.
N. H. Kassabian, A. B., M. D., Coopersville, Mich.
H. F. Langhorst, M. D., Elmhurst, Ill.
R. B. Leach, M. D., St. Paul, Minn.
W. B. Mann, Ph.G., M. D., Evanston, Ill.
T. H. Manley, M. D., New York City.
I. Miley, M. D., Anderson, Ind.
C. C. Miller, M. D., Chicago, Ill.
W. E. Nichols, M. D., Andrews, Ind.
A. N. Ogle, Ph.G., M. D., Texarkana, Ark.
R. St. J. Perry, M. D., Farmington, Minn.
M. E. Poland, M. D., Calhoun, Ill.
M. G. Price, A. B., M. D., LaFollette, Tenn.
E. N. Ritter, M. D., Williamsport, Pa.
B. Robinson, M. D., Chicago, Ill.
E. C. Rothrock, M. D., Philadelphia, Pa.
H. Speier, M. D., Rochester, Minn.
J. Z. Taylor, M. D., Baltimore, Md.
F. G. Thomason, M. D., Kissimmee, Fla.
S. Tousey, A. M., M. D., New York City.
F. S. Tripp, M. D., Pleasant Hill, Ky.
Wm. F. Waugh, M. D., Chicago, Ill.
M. R. Wilkinson, M. D., Oconomowoc, Wis
T. W. Williams, M. D., Milwaukee, Wis.
J. L. Wolfe, M. D., Cedar Falls, Iowa.
E. L. Ward, M. D., Starrucca, Pa.

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LEADING ORIGINAL ARTICLES.

THE TREATMENT OF ISCHIO-RECTAL ABSCESS.

By Charles C. Miller, M. D., 100 State Street, Chicago.

Abscess of the ischio-rectal fossa, at the present day, is almost without exception treated badly by both physicians and surgeons. Such a statement needs but one defense. Consultation of the work of our most competent rectal surgeons will show, that they admit far more than a majority of these cases terminating in fistula. Such is the case yet in the status of modern medicine in lieu of a majority only a small per centage should thus culminate in so serious and undesirable a condition, as fistula in ano.

With the advent of the modern conception of pus, its cause and the consequences of its presence, a general rule in surgery was formulated, that as soon as pus becomes apparent upon physical examination of the part affected, it should be evacuated. This as elsewhere was applied to ischio-rectal abscess, but according to my own conception, a further stride is needed, and then we will be able to reduce to a minimum this present enormous per cent. which culminate as fistula.

Once true inflammation with its cardinal symptoms, pain, heat, redness and swelling it is admitted by all, who treat these cases, that abortion of the process can rarely if ever be secured. Now it is taught by the writers upon rectal surgery, that so soon as pus is recognized in this inflammatory mass, that it should be evacuated. This, to the casual reader, would convey the impression, that in this way the pus would be evacuated, as soon as formed. Nevertheless it is an indisputable fact, that such is far from the truth in this respect. Pus must be present in considerable quantity before it is apparent by our crude methods of physical examination of inflamed parts. Tension, a natural sequence of inflammation, renders the immediate recognition of pus, as soon as formed, impossible. The pus must first soften adjacent tissues, and collect in some quantity before evident to the examiner. The vitality of the tissues filling the ischio-rectal fossa is of all others most readily impaired or destroyed by suppurative processes, Where we wait until the pus forms in considerable quanity, even though the tissues, intervening between the fossa and the rectum, are not destroyed, their vitality is so impaired, that subsequent sloughing is inevitable, and fistula is the

result, though perfect drainage has been secured by a free incision.

If suppuration commence in the deeper tissues of the fossa, it must not only cause a softening of the parts, but become superficial by a destruction of overlying tissues, before it will be possible to recognize its presence.

With aseptic precautions, an incision at the present day is harmless. In view of the deplorable outcome of so large a per cent. of cases according to methods laid down by others, it has appealed to me, that a free incision, as soon as it is apparent that a distinct inflammation exists can do no harm, and it is my conviction, that it will reduce to a very small figure the number of fistulae following its application.

As said before, no harm can accrue from a properly made incision. It must be admitted, that ultimately it must be made, for these cases do not abort, and consideration will make it plain that an incision forty-eight hours before pus formation can do good in many ways. In fact I feel certain that there is no surer way way of aborting the process if it is ever possible to do so, than by treatment through an incision directly into the inflamed mass.

Years ago to check an inflammation bleeding was looked upon, as by far the most effective measure, that could be brought into play. At the present day, the value of depletion in inflammatory conditions is recognized. In this case before suppuration the bleeding, which will result from freely incising in the ischio-rectal region will no doubt prove salutary.

In these cases pain is no inconsiderable factor. The pain is due to tension, this is obvious. No measure conceivable will so perfectly relieve the tension from the afflux of blood to the affected part, than an incision carried boldly the length and depth of the inflamed mass.

No therapy equals that of direct treatment of an affected part. This has been demonstrated in every branch of medicine and surgery. As an organ or part becomes accessible, correspondingly results in treatment improve. Here it is possible to strike directly at the organisms, which are causing the trouble. When the parts have been laid open, as freely as is desired, a copious irrigation with an antiseptic solution should be the second step. Then by packing the incision with antiseptic gauze proliferation of the bacteria upon the surface of the incision is prevented, and where the antiseptic is properly chosen, its absorption will greatly retard the activity of those present in the neighboring tissues.

The cases of my own have been treated with iodoform, as it is an agent, which is absorbed quite readily, when retained within the wound cavity. When absolute hemostasis has been secured upon the completion of the irrigation, it is well to dust into the cavity some of the idoform before packing the cavity with the gauze impregnated with the same agent. To facilitate hemostasis it is well to use the antiseptic irrigation quite hot, above 120 degrees F.

Repeatedly, surgeons have demonstrated the presence of iodoform in secretions or excretions of the body, following its use in the dressing of wounds. In some cases, its absorption is so rapid, that toxic symptoms are produced. In all cases where the wound has been large and the drug used freely in the dressing, it is well to outline the symptoms which occur in those where it has been absorbed in too great a quantity, and instruct the nurse to inform you upon the advent of such symptoms. With such a course iodoform can be used safely.

The direction of the incision to be made in opening an ischio-rectal abscess has been the subject of no little controversy among rectal surgeons.

Most have held, that it should be made parallel to the radiating folds of the anus. The advisability of such a direction has been strongly combatted by other surgeons, and they declare, that the cut should cross these rectal folds at right angles. Though definitely formulated, as a dictum unalterable and correct, both parties have I believe been in error, as to the best mode of practice in these cases. I do not believe that the direction of the folds nor the axis of the anus or of the bowel—in fact any direction taken in relation to normal parts, has anything to do with the line of incision to be used in treating this pathological condition. The inflammatory mass itself should be our guide, and we should make the incision so that it will correspond in length, and in direction with the longest measurement of the mass. In this way, most perfect drainage will be secured in the greatest number of cases. The mass can easily be outlined by palpation, and in allowing the direction here chosen, as most advisable, the operator becomes a thinking and reasoning physician, not merely the blind follower of some other's dictum.

Remember you are to incise, just as as soon as you have decided that an inflammation is present, but in some cases you will not be consulted until after pus has formed in considerable quantity. In these latter cases, the pus is to be evacuated at once through a free incision, and all bands of tissue stretching through the cavity broken down, making one large cavity, which is to be thoroughly irrigated, and sponged out with antiseptics.

Now in order that any tendency for the incision to contract or to prevent perfectly free drainage be overcome it is my practice to trim away the overhanging edges of the abscess. Healing will be slow whether they remain or not, and I have felt quite certain, that there was no interference from the removal of these cutaneous flaps, which are often present, and it appeals to me that drainage is facilitated with a correspondingly lessened tendency to fistula formation.

Slow healing, following ischio-rectal abscess, where pus has formed, is inevitable. One thing is certain, where the flaps have been trimmed away, as advised in the preceeding paragraph, the subsequent packing of the cavity is facilitated.

In the after care of the ischio-rectal abscess, so long as suppuration is free, daily irrigations with an antiseptic should be used. The first treatment of the case having been carried out under complete general anesthesia, no attention was given to the feeling of the patient. Now an antiseptic must be used, which will not be painful. Bichloride not over one to five thousand should be first used, taking care, as well, to see that it is not too hot. Gauze packing cannot be allowed to remain in longer than twenty four hours. When replaced the cavity should be filed. Some men are so afraid that they will interfere with the healing that they will not more than half fill the cavity. When it is apparent, that the walls of the cavity are covered with healthy granulations, then only a strand, to keep the opening patulous, need be used. The bichloride irrigations are to be discontinued, as soon as the virulence of the suppuration has diminished. Bland, cleansing, and stimulating irrigations can then replace the bichloride.

Tell these cases, no matter when you see them, or how certain you are of a favorable outcome, that there is a possibility of fistula formation. Many a physician of mediocre ability has made for himself an enviable reputation, as a physician, merely by his ability to give a correct prognosis, as to the outcome of cases falling into his hands. If you promise this pa-

tient recovery without fistula formation, and fistula should form, you will come in for severe criticism, even though you have exercised all known means to prevent it. If you promise one of these cases rapid recovery, even though he ultimately recover without fistula, you will be censured possibly for the slowness of the recovery, or at least gain no credit for good services.

The character of the tissues filling the ischio-rectal fossa are such, that you can never tell whether your abscess will heal without fistula formation. A broad mass of tissue may exist at the time of opening between the cavity of the abscess, and the lumen of the bowel, but nevertheless the tissues may be so altered as to melt away. With this possibility of sloughing in mind, the operator will not go astray, as to prognosis.

It will be your active treatment which will prevent fistula, and you should not hesitate to accept credit for it, if the fistula does not form.

THE EXAMINATION OF THE STOOLS.

By M. G. Price, A. B., M. D., La Follette, Tenn.

The condition of the stools expresses much to the experienced diagnostician and their examination should never be neglected, though it be an offensive work. This reminds us that we once remarked to the clerk at the medical college that we could smell the "stiffs" in the vats in the cellar, from the office above. The Swede remarked: "That is all right; that is what you come down here for, to smell a stink." And so it was and is. Medical men need not be particular about "small matters". Go ahead and do your whole duty. The more thorough you are the more credit you will get as an examiner.

Only in children is the reaction important and diagnostic of disease and indicative of treatment. Decided acid reaction is found in acid fermentation and alkaline reaction is observed in alkaline fermentation, in both cases indicative of intestinal catarrh.

The normal color of the stools is from bright to blackish brown, though this may be changed by the character of the food eaten.

Portions of food may be recognized in the stools by the naked eye. We may see fibers and pieces of undigested substances, the old name for which was lienteric, such as portions of muscles, flocks of casein and many other substances. All these indicate disturbance of digestion in the small intestine or perhaps in the stomach. This is seen in intestinal and stomachic catarrh, or in the dyspepsia of fever, when peristalsis is exaggerated.

In diarrhoea, dysentery and enteritis, after the first evacuations have cleared out the bowels, the discharge always becomes brighter, then grayish white and watery, or in dysentery bloody.

Where there is a diminished flow of bile into the intestines the stools are lighter. If the bile is cut off they are grayish white, clayey and faintly glistening. An increased amount of fat in the stools shows a diminished digestion of fat.

Those stools which contain the coloring matter of the bile unchanged are called bilious stools. A quick passage of the contents of the bowel and a profuse diarrhoea will bring about this kind of stool. It is indicative of acute intestinal catarrh, especially in children. The color of the bilious stool is bright yellow, green yellow or green.

Very often we recognize mucus in the stools. This in small amounts is normal, but in larger amounts is pathological and indicates catarrh of the mucous membrane. In many cases of intestinal disturbance it is insignifi-

cant. Large masses of mucus in the form of more or less thick shreds, always in great probability indicate catarrh of the large intestine, especially if there be present small roundish particles of mucus, like sago grains. If firm fecal balls covered with mucus are passed catarrh of the large intestine is certain.

Watery stools occur in acute intestinal catarrh, dysentery, Asiatic cholera and profuse diarrhoea.

Fatty stools are recognized by their glistening and greasy look; if there be much the stools are clayey looking.

Bloody stools have a very variable appearance owing to the more or less change in the blood, and whether or not it is intimately mixed with the feces.

When a firm scybala is covered over with blood it indicates hemorrhage of rectum or large intestine; if the blood is not at all changed it is from the rectum or anus. When the blood is mixed with these stools and retains its color and is unmixed with feces, mucus or pus, it points to the large intestine or anus. However, there may be an intimate mixture of blood even in hemorrhage from the large intestine and in watery stools, as in meat-juice stools in dysentery and the catarrh of the large intestine of children. When the blood is intimately mixed with the feces it indicates pretty certainly hemorrhage from the small intestine or stomach. In these cases the bowel is more less changed, brownish red; deep black, tarry. The degree of change depends upon the length of time it has been in the intestinal canal. There is sometimes no change at all, as in typhoid, when a large quantity of blood is hurried from the lower part of the ileum into the colon. Blood which comes from the stomach and duodenum becomes as black as tar before its evacuation. In gastric hemorrhage the blood may appear in the stool like coffee grounds. If we suspect ulcer of the stomach of how great importance is it then that we examine the stools for the presence of blood.

Pus in considerable quantities is frequently found in the stools and thus becomes a symptom of gravest importance. What would you take such an evacuation as a sign of?

Evidently there has been a rupture of a collection of pus into the bowel at some point. Dysenteric, catarrhal, syphilitic and cancerous ulcerations produce considerable amounts of pus and it is necessary to look for this symptom in making out our case.

In making out a diagnosis of gall stone colic we must look to the stools, for a very grave point in evidence is the presence there of gall stones.

In invagination of the intestine the whole piece may be sloughed off and passed out with the stools. Shreds of mucous membrane, portions of cancerous tissue or other new formations may appear in the stools, and anyone who would keep in touch with many very important diagnostic matters must not be above considering such evidences.

PULMONARY CONSUMPTION.

By J. L. Wolfe, M. D., Cedar Falls, Iowa.

As a physician, I deem it my duty to briefly write out and call especial attention to a few symptoms relative to this disease. I wish that every physician would always give timely warning when thousands of our dear ones are dying annually of this most dreaded disease.

The general symptoms of consumption are first dyspeptic. Appetite is variable, digestion faulty and a marked aversion to fatty food, may for some time precede the cough, this being at first dry and hacking and most severe

at night or early morning, and is afterwards accompanied with a clear and sticky expectoration, or it may be tinged with streaks or dots of blood. Weakness of the voice or hoarseness is not uncommon. A dull aching pain under the clavicle is frequently felt, even when the amount of tubercle is small, variously seated muscular pains are common, especially after any exertion which may be excessive in relation to the patient's strength. Sometimes, especially in males, the formation of an abscess near the rectum resulting in a fistula, is one of the earliest symptoms. Loss of weight and emaciation, fever, increased temperature, quickened pulse, etc. form diagnostic signs. Among other symptoms the patient complains of languor; slight exertion ascending a hill or going up stairs causes fatigue, hurries the breathing and frequently palpitation; the uterine functions are more or less disturbed in women and the liver often becomes congested and tender, and in some cases the finger nails become incurvated, while the end of the fingers have a peculiar round or clubbed appearance.

Some, if not all, of these symptoms are found in the first stage of pulmonary consumption, and accompanying these and evidencing the existence of tubercular deposits in the lungs are marked local symptoms As a rule, the deposit affects the apex of one lung at first, and on percussion in the region of the lung, want of elasticity is detected or actual dullness. The expiration is prolonged and accompanying the inspiration, a feebleness is felt and a jerking is heard. When the exudation has become more marked with greater pulmonary irritation, localized evidence of this is shown by sub-crepitant bubbling sounds, or tubular breathing. It should, however, be borne in mind that this disease may have taken perfect hold of the system, and yet be an absence of physical signs, or only the slightest indication of them. In such cases the thermometer is of great service, as it will indicate an increase of the evening temperature over the morning to a greater or less extent.

In the second stage of this disease, with which for convenience of description the third or last stage is included, we find the general symptoms to have markedly increased in severity. There is distinct flattening above and below the clavicles of one or both sides. The fever is more pronounced and is hectic in type, The system is further weakened by profuse night sweats and diarrhea. The cough is frequent and irritable, often causing vomiting; the appetite capricious and digestion greatly impaired. The expectoration is thick and yellow, sinking into a kind of glary liquid pellet-shaped, or from its resemblence to a coin called "nummular"; later on it loses this character and becomes distinctly purulent, sometimes having a greenish color and most offensive odor.

Should a fatal issue result as usually happens in this stage the exhaustion becomes more pronounced, the night sweats more severe, and finally swelling of the feet and ankles is often observed.

Acute pulmonary consumption is not often observed, and runs a rapid course. It seems dependent on tubercular degeneration following catarrhal pneumonia; the pneumonic consolidation, instead of undergoing resolution, breaks down into soft cheesy matter with the formation of cavities of various sizes, at times over the entire chest. Acute pulmonary consumption occasionally occurs as the sole morbid state, or it may set in during the progrcess of chronic bronchitis and often proves the termination of some other chronic malady. It commences suddenly with a chill and fever; rapid pulse with pain and cough; soon there is hectic fever with profuse sweating

and diarrhea; there is rapid degeneration of the lung substance, so that small cavities form speedily; the increasing emaciation becomes daily more perceptible, and death may occur from exhaustion within three to twelve weeks from the commencement of the disease· Generally the tubercular deposit is spread all through the lungs, while instead of being at first deposited in the upper lobes, it often begins in the middle and lower ones.

OBSERVATIONS.

By C. E. Boynton, B. S., M. D., Los Banos, Cal.

MEDICAL EXAMINATION BEFORE MARRIAGE.

The attempt in some states to make laws requiring a medical examination for applicants for marriage is going a little too far. No one will deny that idiots should be prohibited from marrying and so they are in some states, but if consumptives, epileptics, victims of deformity, etc., are to be prohibited from marrying the state is poking its finger where it has no right. To be sure, the syphilitic, until he is cured, should not be allowed marry, so also as to gonorrhea. But are the instances of this kind frequent enough to require that all candidates for marriage submit to a humiliating examination? We all know what a blunderer law is, how easily it can be twisted as an instrument of persecution. The poor consumptive wants to marry as bad as anybody. There is something very much like despotism—worse than despotism—in saying "Thou shalt not." If a man loved a consumptive girl, if he never would try to bribe anybody, he would try to see how a bribe would work on the examining board that had it in their power to blight his happiness. Laws of this kind once started may become more and more exacting. Such laws tend to put law into disrespect, no determined man or woman will submit to them. Man would die first. The instant that law says to rational people you shall not marry, that instant secret relations will receive a justification as well as a popular sympathy.

The law-making function will run up against it, if laws are made and enforced requiring candidates for marriage of sound mind to stand a medical examination before a state or county board that shall say whether or not the marriage shall be allowed. Occasionally we see medical writers favoring such a law. On the 19th of October Jim Younger of outlaw fame suicided because the state penitentiary or state pardoning board refused him the right to marry. Let thie serve as an object lesson to future medical boards that decide that two people shall not marry because one is an epileptic or a consumptive. Jim Younger was very considerate of the comfort of the board that stood in the way of all that life was worth to him. When a state law prohibiting the marriage of ex-convicts and consumptives is in full force many an honest freedom loving man will read with a thrill of pleasure how an august "examiner" has been dispatched by the bullet of the consumptive that he declared should not be permitted to marry.

As well make laws that men shall not eat as they shall not marry.

CASTRATION OF CRIMINALS.

A few "surgeons" of Jack the Ripper tendencies are advocating castration of criminals. It would seem from certain articles of late in medical journals that there are those who crave such jobs. A eunuch may be harmless but some of them may have friends and relatives that resent muti-

lation of their own flesh and blood. Such laws as marriage regulation and criminal castration will never get further than statute books. Medical men know human nature too well to be active in the execution of such laws. They may interest legislatures for some people enjoy making laws to hit the other fellow, but medical men are in poor business suggesting them as they are sure to prove failures because humanity will not tolerate them.

HINTS.

Thyroid extract may be useful in obesity as well as in cretinism.

I am glad to see that journals are reiterating the value of calcium hypophosphite in haemorrhage. It is a wonder worker. This I have proved many times in the last seven years.

Remember sparteine for nervous heart trouble.

Dr. Fall aborts felons by keeping finger in morphine bottle of saturated NH_4Cl, and by local use of the same he aborts palm abscesses.

This is Goodell's rule: Cervix hard as your nose, no pregnancy; soft as your lips, pregnancy.

An antiseptic and anodyne effect are obtained by using strong solutions of potassium permanganate in burns.

To detect tuberculosis early says H. P. Loomis, direct the patient to put hand on opposite shoulder, then auscultate the root of the lung.

Bismuth subnitrate relieves the muscular spasm about a fecal mass, allowing cathartics to act upon the constipation.

By passing electricity through electrodes of carbon in hydrogen atmosphere C_2H_2 or acetylene was formed synthetically.

For anal fissure or ulcer I apply pure ichthyol locally and leave some for patient to apply on cotton. Three cases treated thus healed promptly.

There was the time when a physician could easily make one or two hundred dollars out of a case of typhoid but now with the sulphocarbolates and large doses of calomel it can't be done.

Albuminuria may be diminished by giving 90 grains of strontium lactate per day.

In nephritis salines, nitrites and sometimes digitalis act well with the absolute milk diet.

For chapped hands direct the patient to wash them with a mixture of sulphur and corn meal and wear gloves at night, applying ichthyol pure to cuts and cracks.

Some patients will exaggerate and falsify as to their symptoms. We should avoid treating them if possible or furnish them placebos.

The method of the mental healer is to assert or make a statement without reason. For example, he declares that his patient will sleep tonight or that pain will stop at such a time. To me this method seems based upon dishonesty.

A mental healer whom I severely scored declared that I would soon adopt his doctrines. He was applying his method to me, yet he had no proof to base his affirmation. A lover of truth can not make such groundless declarations. He who only guesses has no moral right to speak as though he knew. This may apply to the hypnotist also. I have often heard it stated that a physician should declare positively that certain effects will certainly follow his medication, thus to add the power of suggestion to therapeutic effect. I have never applied this advice. We do not positively know that emesis will result from a given dose of ipecac or catharsis, or sleep will follow aperients or hypnotics. For the sake of truth and honesty we should refrain from trying to invoke these suggestive influences. Those who begin to use them in many cases drift quackwards.

Rundschau.

By H. Speier, M. D., Rochester, Minn.

AN OUTCKROPPING OF OFFICIAL BUMPTIOUSNESS.

Dr. Lorenz, the great orthopedic surgeon from Vienna, has met a deservedly cordial reception in nearly all the cities visited. But in Chicago he was obliged to qualify before the state board and obtain a medical license for the state of Illinois. An absurdity, nay more, a shame! The medical law of Illinois, as that of every other state in the Union, expressly exempts from its provisions consultants. Prof. Lorenz came as such in a particular case and acted as such in every other case in which he operated. Besides, except in the first case, he took no fee, which by the way was not, as currently reported $150,000, but only $35,000. It is hard to understand why he should have been submitted to such unnecessary annoyance, for it cannot be thought that the wiseacres of Illinois doubted his competency. Was it petty jealousy which instigated the untimely show of official authority? With equal justice resort might have been taken to the Federal Contract Labor Law, for Dr. Lorenz was under contract. The farce would not have been greater. In medicine, of which he is avowedly a master, he had to prove his qualification, then they made him a doctor of laws of which he knows nothing. The whole affair savors somewhat of the genial hospitality which the genial Italian composer Mascagni has encountered, because he unwittingly offended the theatricol syndicate. Is there perhaps a medical syndicate? The existence of one has been asserted.

LESSONS FROM THE SMALLPOX SITUATION IN CLEVELAND.

The Cleveland Medical Journal of February, 1902, contains a lengthy report by Dr. Friedrich, the health officer of the city, on "how we rid Cleveland of smallpox". A pamphlet with the same title found its way to the public. The claim is made that by formaldyde disinfection on a large scale the disease was exterminated in city. The "integrity, scientific attainments and administrative ability" of the doctor are vouched for by the Journal and medical men who took part in the discussion. But the result of his publication has been unfortunate, for the fact that he is really an advocate of vaccination and commends it as the "indisputable prophylactic measure", was lost sight of by the public, while those passages of his report in which he speaks of the dangers from impure virus and the uncertainty of vaccination in the midst of an epidemic, were eagerly seized by the opponents. They did not have to magnify, for Dr. Friedrich's descriptions are sufficiently lurid and his language sensational enough. Note the results. Some months ago there appeared on billboards a poster advertising a cheap popular health journal. It bore in large letters the heading: "Vaccination a Crime". Under it the conventional figure of death, a skeleton with a leer on its face, forcibly vaccinating a schoolgirl on the arm, and under this several passages taken verbatim from the report in question and duly credited to "Dr. Friedrich, health officer of the city of Cleveland, where vaccination has been abolished."

The poster was so large and conspicuous that it caught everybody's eye.

According to recent report, smallpox was not only not stamped out, but has gained a pretty good foothold in Cleveland. Government statistics show that from June 1 to Nov. 22 there were in the whole state of Ohio 2,625 cases of smallpox with 248 deaths, of which Cleveland had 1,103 cases with 189 deaths, nearly half the cases with a majority of deaths. During the same period Chicago had 75 cases with 2 deaths, New York 188 cases with 54 deaths. Dr. Friedrich has created for the health authorities a most arduous task, having built up a ferocious opposition, headed by the enegetic mayor, who advises against vaccination, supported by preachers, who weekly harrangue their congregations, and some physicians, who desire to rise with the popular wave. Large numbers of the population refuse vaccination and the quarantine of infected houses is constantly being violated.

The lessson is obvious. Considerable scientific and practical value attaches unquestionably to the work of the Cleveland health officer, but he overrated it and rushed before profession and public with a premature report, worded so intemperately as to seriously impede thorough sanitation.

ABOUT INSANE ASYLUMS.

A consideration and mild criticism of the general plan of treatment prevailing in our public insane asylums, contained in the Rundschau of last March, met generous consent on the part of some correspondents, while a few intimated pretty broadly, that the writer did not know what he was talking about. Well if the Rundschau was in error, it was in good company. The eminent neurologist, Dr. S. Weir Mitchell of Philadelphia, in an address before the National Association of Asylum Superintendents in 1894, made similar and graver charges. The address was unknown to the writer until recently. A late occurrence at the State Hospital at Rochester, Minn., has called attention to the defects of the present system. A new patient, a maniac, when given his evening meal, attacked the nurse and it required the efforts of the eight attendants of the ward to subdue the man, who had unusual strength and fought violently, and put him in a restraining sheet. Next day the physician found fractured ribs and the man died in less than 24 hours. At the coroner's inquest, a very searching one, fracture of seven ribs on both sides and the sternum was found with laceration and total collapse of one lung, injuries which could only have been the result of great direct violence. The jury, men of known intelligence and integrity, could not fix the blame on any one person, nor the nurses collectively, as they were really fighting for their lives and the fatal injury was accidental. The affair must have resembled a modern football game. The fault lies in the system. While the state recognizes the duty of caring for the insane, it dumps them into institutions not sufficently equipped and into the care of poorly paid and often badly selected keepers.

HOW NOT TO BE NERVOUS.

At the last annual meeting of the Mississippi Valley Medical association, held in Kansas City, Dr. Hugh T. Patrick, of Chicago, spoke on "How Not to Be Nervous." The advice he gave was summed up as follows, according to the Medical Examiner:

"If you wish never to be nervous, live with reason, have a purpose in life and work for it; play joyously; strive for the unattainable, never regret the unalterable; be not annoyed by trifles; aim to attain neither great knowledge nor great riches, but unlimited common sense; be not self-centered, but love the good, and thy neighbor as thyself."

DISCUSSIONS.

This Department contains each month case reports, letters, inquiries and replies from our readers. If you have a case you would like some help with, or a question to ask, write to us and we will publish it in this Department and you will get the opinions of our medical brethren. When you have an interesting case, write a report of it and send it in and it will help some one else. We need each other's counsel so let us help each other from our experiences. Letters are desired from physicians on any subject pertaining to our profession.

MEDICAL RECIPROCITY.

Taking the cue from our political friends the medical profession is loudly clamoring for medical reciprocity. The idea that a diploma and license that will entitle a man to practice his profession in Iowa and yet will not give him the same opportunity in other states of the Union, seems to be wrong somewhere. Undeniably it is a hardship that a better system of education should remedy. The question is why should it be so. If as assumed the medical profession has elevated the standard all along the line so that the college adoption of standard length sessions and years of study are uniform, it naturally looks as though uniformity in state laws should enable a regular graduate to practice anywhere. But he cannot and may be it is right that uniformity is some distance ahead. Let us notice a few reasons why. In the first place the medical college is too numerous by half at least. Four year courses or fourteen year courses in colleges where professors selected from ordinary humdrum practitioners do the teaching, where clinics are mere apologies for the real thing, where bedside instruction is a farce and laboratory work fitfully done, all are alike as the lawyers say, "incompetent, immaterial and irrelevant". Every state in the union probably has several such colleges. It is folly to talk of such an institution in connection with finished scholastic work. The number of these make-believe schools is such that students are sought and the material accepted is often of the raw variety. The practice of medicine must be in the hands of educated gentlemen. The man who sheds lustre upon the profession must be educated; he must be a student; he must appreciate what the pioneers have done for the profession and be willing and able to contribute his modicum to the sum total to professional advance. So great is the rivalry and greed for students that the plowboy and the other seekers after easy-money jobs rush into medicine and are met with open arms by the faculties without so much as a decent inquiry into their fitness to begin the study of a calling which more than all others combined, demands fitness for not alone are human lives the stake but the credit of the profession is on trial. Nor can it be said that all the credit is due to the great medical schools which ought by right to be theirs. In the greed for fees and the glory of turning out monstrous classes students to a number far exceeding the possibilities of thorough instruction are accepted and although the mesh of the admission scale is smaller yet the determination to hatch 27 eggs under one hen results in the usual crop of addled eggs. The lengthened course will soon make it possible for the sons of monied men to be the only available list from which selections can be made. It is a very great mistake to suppose that unless a young man can take a long course in college to be followed by a post graduate course and also a few months or years in Berlin, that he will be a failure as a practitioner. Such opportunities come to those who often need them and they are desirable at all times but we want to get entirely away from the idea that but for these the rotation of the earth upon its axis would need watching. It is and always will be the man not the schooling which

eventually makes the success possible. But the demands upon the individual are such that without the foundation of training necessary to the student, and the education necessary to assimilate facts, no amount of schooling can be of any avail.

Elevate the standard but begin at the end not the middle to do the derrick work. With a large section of the profession decrying the tendency to self protection in dispensing one's own medicines, and the knowledge that except a specialty is had only a bare living is to be made in the profession, the fact must sooner or later come to all that one of the first steps to be taken to secure uniformity of laws giving to us the privileges which our diplomas should vouchsafe is to muzzle the ubiquitous medical school. It is one of the idlest of fancies that a few back alleys of Chicago control the retail diploma trade.

J. A. De Armand, M. D.,
Davenport, Iowa.

NUCLEIN.

In the November Recorder, page 361, Dr. Camp has called our attention to nuclein and assured us of his high regard for it because of its utility. This is certainly the right way to measure the value of any remedy, but, after reading the doctor's article, I am compelled by the force of evidence to question his knowledge or his integrity, and I am moved to write this response to it by a feeling that the appearance of such articles in our journals is an insult to every physician worthy of his calling.

Last week an ignorant but rather witty gentleman called at my office. I handed him a few tablets, directing him how to use them, and he looked at them and said: "They're sugar coated, ain't they? That's a sure sign there's something nasty in them." Then his zygomatics began to contract and his sides shook with laughter, while I added fifteen cents to his account. Well, I did not laugh when I read Dr. Camp's article, but instead, I felt the disgust that a patient feels when he sees a sugar coated pill after being nauseated by them. Coated pills are nice when the coat is soluble and their contents beneficial and harmless, but I find some people who are suspicious of them. There are others, of course, who will deliberately swallow everything that looks palatable, until I am surprised that Dr. Byron Robinson has not been called to operate on them for splanchnoptosis, or Dr. Boynton to suggest a milk diet. Dr. Camp certainly knows this or he would not have written this article.

"Certain poisonous material when it enters the system produces stimulation of the protoplasm through the irritation set up, and if long continued the irritability is exhausted and sedation follows, but nature's laboratory is so well adapted to the production of all defensive materials necessary that at this time a protoplasmic stimulant is produced possessing all the properties of an antiseptic that is non-irritating, and by improper or inefficient metabolism we get defective leucocytosis and nuclein product is wanting, and here artificially prepared nuclein can be introduced." Doctor, isn't that plain? Yes, it is really so plain that it it slouchy. I think, perhaps, I can diagram that sentence, but when I begin at "certain poisonous material" and try to think through to "and here artificially prepared nuclein can be introduced," I—well, words do not describe my feelings. All I can say is that seven years' study of medicine has not enabled me to wade through it. I am really afraid to venture far from shore for I can find no bottom and I fear there is none. I believe the truthful part of this sentence consists of its last eight words.

Notice the language—"can be introduced." The author says we may introduce it even hypodermically, and I am anxious to know whether Dr. John Aulde, of Philadelphia, is not anxious to have us introduce his friend nuclein at any time.

Dr. Camp, are you really a human being practicing in Vermont, or do you exist only in some one's imagination? If you truly wrote these lines will you kindly give some evidence that you can not be bribed? Your article is so contradictory that it does not appeal to me. You begin by giving an excuse for writing the article and you close with another one. Conscience must have been pleading, for one never needs an excuse for doing right. In your first paragraph you spoke of money making schemes which smacked of quackery. Doctor, how did you happen to be thinking of quackery? You say nuclein has been known for sixty years. Isn't it queer how people are so unselfish that all but a few want the other fellow to have all the good things and that this boon to humanity has been used "only in thinly scattered places"? You name articles which we eat every day, and say that nuclein is made from them. Can Dr. Aulde make a better preparation than nature herself? "But nature's laboratory is so well adapted to the production of all defensive materials necessary." What's the use of a patient consulting Dr. Aulde when he has a perfect nuclein factory within himself? To do my utmost I can not think that Dr. Aulde is a philanthropist. Were he such he would price nuclein, which is made from such common material, with other remedial agents. Were this true, nuclein would be used where useful without sugar coated articles written upon it and published in our journals. If it be useful in the cure of "throat affections" (specific, isn't it, reader?) "bronchial and cutaneous disorders" (most any of them, I suppose), "digestive disturbances" (overeating for instance), "pulmonary congestions, pneumonia, etc.," certainly many of our studious therapists will find it out. It's too bad, doctor, that you forgot to mention consumption, cancer and old age.

Your pneumonia patient reminds me of a patient I had recently. I was assured at ten o'clock at night that she had "been eating nothing more than usual". A hypodermic of $\frac{1}{10}$ grain of apomorphia muriate very quickly chased out enough mince pie and bologna sausage to confirm a diagnosis. After giving another hypodermic I left her sleeping. Before I had gotten to sleep the husband assured me that she was dying. When I arrived I found her just as I had left her except that she was awake and about an hour older. Knowing that I would get no rest that night I decided to stay with them till morning. She slept until she snored and until I envied her, but she told me the next morning that she had not slept. The next night she did not sleep (?). The next night I gave her sulfonal and hedonal, but she and the husband each said that she did not sleep. The next evening I gave her four number 2 capsules of powdered opium, directing her to take one every hour till she went to sleep. When I called the next day she said: "I sat up in bed all night. I was sleepy, but I was afraid to go to sleep for fear I would never wake." The next night I did not give her anything. Perhaps she should have had nuclein, I do not know.

Now, doctor, come again. Give us something practical. Write an article that will appeal to doctors as being something they can tie to. Quit writing for pay and go to work for a living. The time will come when even nuclein will not animate the cells of which your body is composed, and it will be fortunate for you to have treasure laid up in heaven. Let Dr.

Aulde sell all the cell juice he can. He, too, will see the error of his way directly, when his theory fails to furnish him dollars, and we'll all have a jolly time togetber when we meet in the land which floweth with milk and honey, and when dollars and doctors and disease, and even nuclein, are unknown. M. E. POLAND, M. D.

Calhoun, Ill.

Evidently Dr. Poland has been reading some of the so-called clinical articles which give evidence very clearly that they are written for advertising purposes and are not based on actual clinical experience and accordingly he is filled with righteous indignation upon seeing any article which he thinks savors of commercialism. However Dr. Camp's article on Nuclein cannot be closed with such productions. His paper was read before the Washington County (Vermont) Medical Society and furnished to the Recorder for publication as an original contribution. We regarded the article of scientific and practical value and published it as a leading article in our November number. While the author referred to Aulde's nuclein yet the article could not be considered as an advertisement of this special product any more than a reference to Squibb's or Merck's chloroform could be considered an advertisement. The article would be of equal benefit to all manufacturers of a reliable nuclein from animal sources.

We regard the idea of nuclein therapy very valuable, and its adoption as a distinct therapeutic advance. Nuclein is a proteid substance containing a large proportion of phosphorous in the form of nucleinic acid combined with a complex base. The action of nuclein in the system is (1) that of a natural antiseptic, to destroy toxic products which may accumulate through faulty elimination, (2) that of a natural bactericide, to resist microbic invasion. Dr. S. O. L. Potter in the new edition of his "Handbook of Materia Medica and Pharmacy", says of nuclein: "Its employment as a therapeutic agent is based on the assumption that for immunity against and the cure of bacillary diseases we should look to non-toxic germicides of cellular origin, and to substances which stimulate the activity of those organs whose function is to protect the body against such invasion. . As the nucleins apparently fulfill these requirements they have excited considerable attention among the advocates of animal extracts. Nuclein has been successfully used, in diphtheria, suppurative disorders, also in chronic rheumatism and malaria, chronic bronchial catarrh and neurasthenia, and has been employed in tuberculosis with encouraging results (Vaughn). In one case of an ulcer of twenty years' standing was cured in four months by the local application of nuclein. A physician reports his own case, one of genito-urinary tuberculosis, as apparently cured by nuclein injections. In simple anemia, chlorosis, typhoid fever, debility from any cause, and convalescence from acute disease, such as pneumonia and influenza, the beneficial results of nuclein medication are prompt and permanent (Aulde). As bactericides the nucleins may prove useful by reason of their harmlessness to the human subject."

We sent a copy of Dr. Poland's article to Dr. Camp so that he could explain at more length some of the points of his article. Dr. Camp is now taking a post graduate course in New York City so that he cannot prepare such an article at present as his time is fully occupied with his clinical work and also for the reason that he needs his library and data to assist in preparing such an article. Dr. John Aulde has prepared an article for the Recorder which brings out some of the desired points. Dr. Camp has read a copy of Dr. Aulde's article, and gives it his entire sanction. This discussion

of nuclein therapy we are sure will be welcomed by many of our readers who are interested in the subject.—Editor Recorder.

NUCLEIN.

My position with reference to the subject of nuclein medication will be understood from a consideration of the question from three different viewpoints, namely, the scientific, the therapeutic and commercial, and I beg to add that not only is there no excuse deemed necessary, but there are reasons in abundance for the stand taken, as will be apparent to the most obtuse observer.

(1). The scientific aspect of the quesiion will be understood by recalling that in 1890 I introduced the term, "Cellular Therapy," the definition of which is given in Gould's Medical Dictionary in my identical words. The same is true of the definition of "Organo-therapy," as found in the Standard Dictionary (1892). In 1894 I first brought to the attention of the profession the practical applications of nuclein from animal sources, introducing "Nuclein Therapy" as a department or section of "Cellular Therapeutics," as I believed at that time that ere long this study would prove as interesting and instructive to the profession as did Virchow's celebrated work upon "Cellular Pathology." My investigations began with the object of discovering the cause for the profound depression attending the use of dessicated thyroids and ended in demonstrating that the products possessed certain physiological properties which might be turned to therapeutic account. Brown-Sequard's theory relating to testicular extract was then in the air, but during the year 1894 the scientific character of diphtheria antitoxine was promulgated, although its therapeutic efficiency was seriously questioned. Indeed, I doubt if this product would have secured so firm a hold upon the medical profession had not the German government given its official sanction. It was my contention at that time, and I still believe, that diphtheria antitoxine is nothing more than a specialized nuclein resulting from the action of the special irritant upon the blood and cellular structures of the animal inoculated. Professor Wm. H. Welch (the Huxley lecture, "Recent Studies in Immunity with Special Reference to Their Bearing on Pathology," Bulletin of the Johns Hopkins Hospital, December, 1902), practically covers the entire ground, as follows: "The mode of antagonism of the specific bodies formed in response to the reception within the living organism of substances capable of inducing the necessary reaction varies with the nature of these latter substances and consists in such diverse manifestations as neutralization of poisons and of ferments, injury or destruction of cells, associated with characteristic morphological changes, cessation of motility of cells or their appendages, agglutination of cells, precipitation and coagulation. In accordance with these different effects the corresponding antagonistic bodies, or anti-bodies, as they are called, are classified as antitoxines, anti-enzymes, cytotoxines, agglutinins, precipitins and coagulins, and even against these bodies, with the exception of the antitoxines, antagonists have in turn been produced. * * * * * To every cellular group of an animal species there appears to correspond a specific antitoxine. * * * Their specificity extends not only to the nature of the cells, but also to the species of animal furnishing the cells used for their production."

Prof. Welch points out the important work accomplished by Metschnikoff and his pupils in "demonstrating the direct participation of leucocytes and other cells in the process of infec-

tion and the production of immunity." Again, he refers to another line of work, by Nuttall, "systematic study of the anti-bacterial properties of the body fluids, particularly of the blood serum" (1888), although he admits some previous knowledge existed of the power of fresh blood to kill bacteria. John Hunter is mentioned as being "quite familiar with the anti-putrefactive power of fresh blood, although of course, he knew nothing of bacteria." He referred to it as "the living principle of the blood," a slight variation from our modern definition of nuclein, "the active principle of life." I have referred to nuclein as the chief of the so-called "defensive proteids", now spoken of by Prof. Welch and others as "anti-bodies".

On this topic Prof. Welch makes the following comment: "Concerning the source, mode of action and constitution of the specific antagonistic bodies we are very imperfectly informed," although he admits that their cellular origin seems certain.

One more quotation will show the almost identical position claimed for the nuclein from animal sources with which my name is associated and these anti-bodies now being searched for by the experimental physiologist: "The most remarkable and characteristic attribute of these anti-bodies is the specificity of their relation to the substances which have led to their formation. * * * * This property is the basis of new and most valuable methods for the identification of species and the determination of genetic relations—species not only of living things, but also of chemical substances and of disease. The resemblances and the differences thus revealed are doubtless fundamentally of a physico-chemical nature, but in many instances they transcend the powers of the microscope, or of ordinary chemical tests to detect." This latter statement will furnish a clew to account for the inefficiency of the imitation products which have been floated since the introduction of the genuine nuclein.

(2). The therapeutic or practical side naturally demands our most careful attention, because through the instrumentality of modern research rests our hopes for the advancement of scientific medicine. The question is, can we modify disease processes by the use of remedies which act upon the cells? Other questions then present themselves relating to the physiological condition of the cells, because in disease we have to deal with disordered cell function, and every living cell becomes an entity. So long as the blood contains John Hunter's "living principle," tissue change will be maintained, but when this vital activity is deficient or absent, cell reversion takes place with the formation of cell poisons (cytotoxines), and it is here that nuclein acts as an anti-body, reinforcing the normal "defensive proteids," more especially the nuclein or alexin product of the multi-nuclear white blood corpuscles.

In no formidable disease is this effect more notably manifest than in the case of scarlet fever, but its sterling merits have not long been recognized, notwithstanding a long and arduous campaign. Let me give an illustrative case—from real life too. Medical attendant at his morning visit tells parents that the child will die, that this is an exceptionally severe case of scarlet fever and nothing more can be done. To keep the nurse busy, he gives her a sample bottle of nuclein tablets with instructions to administer them at certain stated intervals, although he has been particularly advised that the solution should be given hypodermically in these cases. Doctor does not return, expecting to be called upon by the undertaker, but on the following day in the afternoon, nurse calls him over the 'phone and gives him the following in-

formation. Child's temperature, normal (at the doctor's visit the previous morning it was 103.5). Nurse thinks there must be something wrong as the child wants nourishment and seems to be so much better, and she suggests that the doctor call and see for himself. Suffice it to say that this child recovered without untoward incident.

Sometime ago I had the pleasure of meeting a number of physicians who had met with exceptionally satisfactory results in the treatment of scarlet fever by nuclein. In one instance the physician remarked the prompt effect of nuclein injections upon streptococcus infection, not only in scarlet fever, but also in the case of diptheria (after the use of antitoxine), and he was firm in his belief that it is the most effective remedy known to the profession. Another physician, after an experience of eight or nine months, announced that he desired no other medication than nuclein hypodermically for scarlet fever, and he said that complications were rare and of no moment. As compared with routine methods, which required an average of fifteen visits and covered several weeks in time, he now injects nuclein (Aulde) at the first and each succeeding visit, with the result that three visits are usually sufficient, and the patient can be dismissed at the end of a week.

The profession is well informed concerning the efficiency of nuclein (the genuine product), in the treatment of tonsillitis and other throat affections. Consumption also responds to physiological cell medication. A medical friend told me the other day that he was perfectly astonished at the results. He says, "all my phthisis patients are getting fat and I only gave them three or four injections weekly. Cancer too, has been cured, but were the use of nuclein confined to the treatment of the above mentioned diseases, scarlet fever, tonsillitis, tuberculosis, streptococcus infection and pneumonia it would prove a boon to humanity.

One word more. To the question, if nuclein is everywhere, why should the doctor or patient buy from anyone? I could say the same of oxygen, but in the case of nuclein there is a difference. In the egg for example, you can obtain nuclein from the germinal area of the yelk, but the vitality is destroyed by the application of heat. Thus, no one would think of attempting to hatch a boiled egg any more than a true sportsman would shoot a dead duck, and that is my reason for not blazing away at the fossilized mossback who has taken a shy at my teachings under the mistaken notion that they represent the climax of medical transcendentalism.

(3) The commercial end of the business is a question of little moment. It is a matter of utter indifference to both doctor and patient who devised the remedy or method of treatment. When the doctor finds a good remedy or combination he forgets sentiment. The question with him is, Can I rely upon the manufacturer? Thus, Behring perfected the application of antitoxine, but the German government became sponsor for it, and in this way gave its approval, amounting to legalization. New York and some other cities in this country also manufacture antitoxine. Professor Welch, whom I have quoted so freely, is an experimental investigator whose studies have resulted in most valuable additions to our find of medical knowledge, but without the financial co-operation of the school with which he is connected, the incentive to continuous work would be lacking. So, practically, all this experimental work hinges upon the reports of physicians, and if they choose, there is no reason to deter them from taking up the practical end, by developing the business on a commercial scale. JOHN AULDE, M. D.

Kennett Square, Pa.

A NEW TREATMENT FOR BOILS.

Hon. Jno. W., a wealthy cattle man of south Florida, had been living very highly for some time, eating roast pork, puddings, cakes, etc. He was attacked with several boils, the largest one being on the end of his nose. The colonel being a very modest man decided that instead of placing himself under the treatment his wife's doctor would subject him to he would take "Jake", his servant, and go to the woods until he recovered. A nice boat with all the canned meats and fruits, with a supply of sauces and pickles, and a jug of the "oldest corn," he and Jake sailed out on the lake to be out several weeks. There was nothing to attract their attention for the first two days, but on the morning of the third, while the colonel was holding his largest boil with both hands, Jake spied a large buck feeding not far from the shore. After informing the colonel Jake proceeded to anchor behind some timber. When he had the small boat ready the colonel had forgotten his nose, boil and all, and put the heaviest charges in his gun. When they reached the shore they slipped along half bent and when they got through the cypress swamp the deer was only sixty yards from them. The colonel raised his gun and pulled both triggers, and then found himself flat on his back, the blood and pus streaming from his nose, and Jake says that the smell of sulphur has not left the place yet. But the colonel promised to spare his life if he would not tell how his boil was opened. And the colonel has the large horns of the deer mounted in his parlor.

F. G. Thomason, M. D.
Kissimmee, Fla.

5,000 doctors now receive the Recorder each month.

A HEMORRHOIDAL ACOLOGISM.

Hand in hand with the "cheerful idiot" who gives voluntary medical advice there ambles the "wise" individual who knows all about medicine. One of these "wise guys" invaded the stillness of my territory recently and as a result a calamity nearly robbed me of one of my best friends. As the w. g. is a minister of the gospel and a relative of his victim, there was no complaint, but had I done the same trick my infamy would have been proclaimed from the housetops—yes, even with the temperature at –30 degrees F.

One of my patients, aged 87 years, is troubled with constipation and rectal prolapsus. After much study and many trials I found that five drops of cascara evacuant (P. D. & Co.) would secure a stool without precipitating the prolapsus. He was supplied with a ℥ij bottle of the powerful purgative potion and told to purge p. r. n. under the personal supervision of one of the family. Subsequently the patient's wife, aged 78, became constipated—a transitory attack.

Enter the "wise guy".

In the course of family disclosures, mother's constipation was discussed, father's condition analyzed and his medicine brought out for inspection. The w. g. opened the bottle and tasted.

"Yes, I know what that is. I've taken lots of it. I take it in teaspoonful doses and it works fine in almost no time."

In the joy at this flood of free wisdom mother forgot that the medicine had been prescribed to meet the particular condition of her husband and that the dose was from five to ten drops. Mr. Wiseman, having sown the seed, dropped from the scene. And mother took a teaspoonful of cascara evacuant. Not perceiving the

fine work "in almost no time" she repeated the dose in an hour. At the distal end of the second hour she was still suffering from hope deferred and took another teaspoonful. And then—

When I was called the next day there had been one long continuous funeral,—no it did not kill the old lady, but judging from her appearance, before and after, it was a safe venture that the greater portion of her was interred.

By the way, my friends, that reminds me that the cascara evacuant is a good cathartic or laxative which can be used in small doses, and one that comes handy in making up mixtures where such a remedy is wanted as an adjuvant. Here is a formula I have found useful in ordinary primary piles, where chronicity has not yet developed.

℞ Cascara evacuant, ℥ss
Sp. tr. hamamelis, ʒj
Sp. tr collinsonia, ʒj
Spts. vini rect., q. s. ad, ℥j
M. Sig. Twenty drops after meals.

This internal treatment, in combination with an appropriate local application, ointment, glycerite or suppository, will rapidly relieve piles of people who have piles.

Try it once.

RALPH ST. J. PERRY, M. D.,
Farmington, Minn.

NOTES.

Dr. Peabody is proposing aspirin as effective in pneumonia.

Glycerinated carbolic acid about 30 per cent. is effective in burns.

For hemorrhoids inject into rectum echinacea and hamamelis.

In nephritis we should avoid meats and advise milk and carbo-hydrates, much rest in bed and warm clothing.

Carbolic acid and the sulphocarbolates prevent food in the alimentary canal from undergoing putrifaction in fevers, like influenza, pneumonia, etc.

Dry or wet cups over kidneys, purgation, diaphoresis, venesection, water by stomach tube if unconscious or saline solution into a vein are measures to be resorted to in Bright's disease.

He who is inclined to discourse upon the worthlessness of life is in a pathological condition often beyond the reach of our skill. To treat him is usually a thankless task and most of us are glad to pass him on.

Melancholia frequently means auto-intoxication and the indications are regulation of diet, proper exercise and intestinal antisepsis.

It is unfortunate when we have to give a name to a medicine or mode of treatment so that the patient can hang a thought upon it. Lately I saved a child with diphtheria by the use of antitoxin. After a few weeks the child being unwell the mother declared that the constitution of the child had been broken with antitoxin. Had she not known a name for the treatment she would have blamed the disease instead of the medication for after ills.

For years it has been my habit never to confide the nature of treatment to my patients when it is possible to keep it secret.

Dealing out my own medicines, when possible I gather up containers and remaining medicines after a patient dies.

It is not at all uncommon for suspicious laymen to take the remaining medicine used in a case deceased to a druggist to get it "analyzed". I lately forestalled some of these over-curious people by taking away my medicines at my last call when the patient died with delirium tremens. They are now inquiring if I had a right to do this.

C. E. Boynton, B. S., M. D.
Los Banos, Cal.

The Wisconsin Medical Recorder.

A Monthly Journal of Medicine and Surgery, devoted to the best interests of the whole profession.

J. P. THORNE, M. D., Editor and Publisher, Janesville, Wis

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Letters, Case Reports and **Questions** are desired for our Discussions Department.

Society news and reports and items of interest are gladly received

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THE PLAGUE.

This country will be visited with a severe epidemic of the bubonic plague during the coming summer unless thorough sanitary precautions are taken. The plague has existed in the Chinatown district of San Francisco for some time. The San Francisco authorities made the foolish mistake of denying the existence of the plague, although they knew it to be the plague. Expert bacteriologists have demonstrated the presence of the genuine bubonic plague until it can no longer be denied. Many authorities think it cannot be eradicated until Chinatown has been completely destroyed with its filth and disease.

Surgeon-General Wyman recently visited San Francisco and succeeded in getting the authorities at work to prevent the spread of the disease. He thinks that proper quarantine, improved sanitation and less crowding in Chinatown will prevent the disease spreading. The plague has become epidemic in Mexico and people are dying from it by hundreds there. We hope that strict sanitary regulations in this country will prevent the disease spreading.

EDITORIAL NOTES.

Dr. C. C. Miller's articles on practical surgery are pleasing many of our subscribers. Dr. Miller will write an article each month this year. He is a practical surgeon who believes in helping the general practitioner.

We shall be glad to bind your 1902 volume of Recorders for you. For sixty-five cents we will bind the volume in black cloth and leather and return the volume to you by prepaid express. We do not pay express charges on any binding except the Recorder.

When writing anything for the printer, always be sure you write every letter distinctly. When giving your name and address, you should be especially careful to write distinctly. We frequently receive label orders written so indistinctly that it is a difficult matter to decipher them.

The large number of subscriptions, new and renewal, received by us during the past month has taxed our office force so that we have been unable to give as prompt attention as usual to our orders. However, we have now caught up and are prepared to give prompt attention to all correspondence. We expect during the next month to receive many more subscriptions. We continue to give one thousand premium labels with each subscription, new or renewal. If your subscription has expired we hope to have your early renewal and shall take pleasure in promptly sending you our premium labels.

THE DOCTORS' LIBRARY

This Department contains each month reviews of the latest and best books. Items of book news will keep readers informed on progress in the world of medical literaure.

LESSONS AND LABORATORY EXERCISES IN BACTERIOLOGY.—An Outline of Technical Methods Introductory to the Systematic Study and Identification of Bacteria, Arranged for the use of Students. By Allen J. Smith, M. D., Professor of Pathology in the University of Texas, Galveston. Pages 298. Illustrated. Extra cloth, $1.50. P. Blakiston's Son & Co., 1012 Walnut St. Philadelphia.

This book is the outgrowth of a series of lessons which the author gave his class in the University of Texas. The rapid development of the subject of bacteriology and the study given it now, make such a book very necessary. The book conducts the student in regular progression through the processes and modes of operation by which, bacteria may be studied for the recognition of the individual organism and its proper classification. Some of the subjects considered are Preparation of Tubes, Dishes, etc., for Culture Media, Inoculation of Media and Cultivation of Bacterial Cultures, Individual Bacteria, Their Physical and Chemical Characteristics, Pathogenic Action of Bacteria. An important chapter is the one devoted to Classification and Identification of Bacteria. This chapter is of special value for reference. The book is a working laboratory guide for student and practitioner. It is interleaved with blank sheets upon which can be recorded the results of experiments. The work is nicely bound in cloth and is illustrated with sixty-eight cuts.

OBSTETRICAL NURSING FOR NURSES AND STUDENTS.—By Henry Enos Tuley, M. D., Louisville, Ky., Professor of Obstetrics, Kentucky University, Medical Department; Visiting Obstetrician to the John N. Norton Memorial Infirmary, Louisville City Hospital and the Home for Friendless Women, etc. Pages 202. Price, cloth, $1.00 net. G. P. Engelhard & Company, Chicago.

This book is published especially for the use of nurses and gives a concise summary of obstetrics. The first two chapters are devoted to the anatomy and physiology of the female pelvis and generative organs. One chapter gives an outline of embryology. The signs of pregnancy are so clearly depicted as to be quickly recognized by the nurse who has read the book. The conduct of labor is well described and the nurse's duties clearly presented. Advice is given regarding the care of the mother before, during, and after labor. The care of the new born child is carefully presented. The author tells how to prepare different foods for both mother and child. The book is an excellent treatise for the use of nurses and contains suggestions on obstetric nursing not found in obstetrical text-books which both obstetrician and nurse can use to advantage. We notice Dr. Tuley speaks highly of Dr. Kellogg's funis ring and gives the reason why it is the best method of dressing the funis.

GENERAL SURGERY.—Edited by John B. Murphy, M. D., Professor of Surgery, Northwestern University, Medical School. Volume 2, Second Series of the Practical Medicine Series of Year Books, under the General Editorial Charge of Gustavus P. Head, M. D., professor of Laryngology and Rhinology, Chica-

go Post Graduate Medical School. Pages 553. Illustrated. Cloth, $2.00. The Year Book Publishers, 40 Dearborn St., Chicago.

This volume gives extended reviews of many articles and sufficient details to form a working basis for the general practitioner without necessitating reference to the original papers. Attention is given to some of the newer achievements of surgery, such as surgery of the pancreas, the kidney, the muscular and nervous systems. The observations which the editor gives from his rich experience make the book a practical work for the general practitioner. The work is well bound, printed and illustrated and is very cheap. The price for the series of ten year books is $7.50. These books have received a generous support by the whole profession.

PRACTICAL GYNECOLOGY, OBSTETRICS, AND THE MENOPAUSE.—By A. H. P. Leuf, M. D., Philadelphia, Three Parts, Complete in one volume of 326 pages. Price, cloth, $2.50. Published by the Medical Council, 4105 Walnut Street, Philadelphia, Pa., U. S. A.

The true key to this work may be in the following extract from the Preface:

"A treatise upon any subject should be more than a mere dictionary of terms and methods; it should teach principles and their application; should stimulate investigation."

Part 1. The general practioneer his own Gynecologist.

In the "Forward" to this department the author plainly shows the great value to the family physician, both professionally and financially, of a thorough knowledge of the science, and competent skill in the art, of gynecology (properly pronounced jin-e-cology, not guy-ne-col-o-gy.) He also argues its reasonably easy attainment.

The author takes up examinations, diagnosis and treatment of diseases of women in proper sequence, not going into controversial matters, but giving only the practice which in his own hands has been most successful. It can be used as a working guide to the physician in his daily practice. The language is direct, plain, concise, using the fewest possible words to plainly express the meaning.

Part 2 is, "Common Sense in Obstetric Practice."

In the "Foreword" to this department the author shows vividly the extreme importance of the doctor's being so thoroughly prepared in the technique of obstetrics that he will be able to meet the various emergencies that arise in which prompt, skillful work may save one or both lives, and the possession of which skill alone distinguishes the physician from the ordinary midwife and justifies the public in employing him at a greater cost.

Part 3 discusses the Change of Life in Women. The great object of the author in this part is to relieve this much-misunderstood subject of the mystery with which it is invested in the minds of the laity and many of the profession, and to show the plain physiologic laws by which all its supposedly mysterious manifestations are easily explained.

THE MATTISON METHOD IN MORPHINISM.—A Modern and Humane Treatment of the Morphine Disease. By J. B. Mattison, M. D., Medical Director Brooklyn Home for Narcotic Inebriates. Cloth, 12-mo. Pages 40. Price, postpaid, $1.00. Published by the Author.

This book—the outcome of 30 years' study and experience—gives, in detail, a method of treating the mor-

phine disease, original with the writer, and long practiced by him with success. Dr. Mattison is high authority on the treatment of morphinism, having immense experience with morphinists, and asserts his method is in advance of others—in cases eligible for its use—to secure two leading objects—minimum duration of treatment and maximum freedom from pain.

We commend it to all for whom the subject may have a special interest, for it has been called "the most notable advance in the therapeutics of this neurosis, and, as has been well said, 'is a boon to humanity, and an honor to American medicine.'" The book is small but contains much practical help in condensed form.

BOOK NOTES.

Success for January is brighter, bigger and better than ever. The articles in this magazine are inspiring to whoever reads them, no matter what age. Biographical sketches, accounts of the successes of the world and good suggestions occupy many of its pages.

The Household for January is a fine issue. It contains fiction by prominent writers, practical articles and various departments devoted to household matters. An excellent illustrated article is "Raphael's Saint Cecelia," by Henry E. Jackson. We note on improvement each month in this excellent home magazine.

Conkey's Home Journal for January contains a special article entitled "The Greatest Electric Railway in the World," which tells of the progress of electrical inventions as exemplified in the new surface railway between Chicago and Aurora, Illinois. A practical series of lessons on lace making begins in this issue, which are designed to teach women and girls the art of lace making for pleasure or profit. A number of short stories and the departments fill out a good issue.

The leading article in the January McClure's is "The Shame of Minneapolis," by Lincoln Steffens. It was only a few months ago that Mr. Steffens' "Tweed Days in St. Louis" came out in McClure's, and made the whole country stop and consider, and people who thought they knew something about municipal corruption reconsider. Now follows Ida M. Tarbell's History of Standard Oil which is writing of that same kind, and the third installment of it, which appears in January, "The Oil War of '72," is magnificent. Ray Stannard Baker's "The Sight to Work," is straightforward, ungarbed account of what it cost some of the workers in the coal fields to stick to the work as their conscience bade them. John Swain writes excellently of Adolf Lorenz, "The Great Austrian Surgeon with the soft, strong hand," telling us just what we want to know of the great surgeon's history and of his famous operation. Clara Morris contributes, "I Stand Between Lady Macbeth and Matrimony." George W. Smalley reminisces again about "English Men and Letters," and his his list is a varied one, including Du Maurier, Hardy, Trollope, W. S. Gilbert and Mrs. Humphrey Ward. Fiction, pictures and poems round out the number.

The leading feature of McClure's magazine for 1903 is the "History of the Standard Oil Company," by Ida M. Tarbell, author of "Life of Lincoln," "Life of Napoleon," etc. Thirty years ago John D. Rockefeller conceived the idea of combining all of the widely-scattered elements of the oil business in such a way as to con-

trol it completely. At that time he was president of a company capitalized at $1,000,000. Twelve years later he was the president of one capitalized at $10,000,000, handling 95 per cent, of the business, and was recognized as the ablest commercial leader this country has produced. How Mr. Rockefeller accomplished this virtual monopoly of the oil business is the theme of this history. It begins by telling the amazing story of the attempt in 1872 of a few men, among them the leading officials of the Standard Oil company and the railroad kings of the day—Vanderbilt, Gould and Scott—is seize the entire oil industry, an attempt forstalled by a popular uprising in the oil regions. It tells the story of how, later, by securing special freight rates on the railroads, the Standard became the most nearly perfect monopoly of the nineteenth century. It rehearses the tragedies which the rise of the Standard brought about. It describes the ability, the energy, the relentless perserverance employed to build up the most powerful and complete business organization which the world knows.

This history is a great human drama. But it is more; it is an object lesson on the trusts, the story of the conflict of the two great commercial principles of the day—competition and combination. Miss Tarbell, whose "Life of Lincoln" brought out unknown and and important facts and showed such sympathetic insight into the character of the great president, tells this history in the same way, with absolute sincerity and without partisan passion. The series will be profusely illustrated with drawings, portraits, maps, documents, etc.

The "New Year" nnmber of Lippincott's Magazine is a veritable mine of good fiction, containing a whole novel and nine short stories, besides several papers of timely interest, some choice verse, and fun galore in the department called "Walnut and Wine." The novel is "The New Heloise," by Mrs. Schuyler Crowinshield. In this there is a new evidence that "Love Laughs at Locksmiths" and stone walls—even those of a French convent. There is a young probationer behind these walls seeking refuge in priestly garb from a distasteful marriage arranged by a too-zealous stepmother. But he is not destined for such a life, and Love is waiting for him in the form of as charming a French girl as can be imagined. A candidate is lost to celibacy and happiness reigns supreme. J. G. Rosengarten's paper on "Franklin in Germany" must make a wide appeal at this time. It pleases while it informs.

The feature of the January "Everybody's" is a new "Arabian Nights" story found recently by Dr. Seybold, of the University of Tubingen among the Arabic manuscripts of the late Consul Wetzstein of Damascus. Bessie Van Vorst describes her experience in factories in Chicago, being the last article of the series of "The Woman that Toils." Juliet Wilbor Tompkins contributes a most interesting study of "The Personality of Helen Gould." In "Tragedies of Steamboat Histories," G. W. Ogden tells some dramatic stories of life on the Mississippi. "Mrs. Dazzledick's at Home," the third of the "Unemployed Rich" series, describes the typical New York society woman on the search for sensational entertainment. There is a vivid account of the personality of Andrew Jackson and the scene at Calhoun's supper at "The Indian Queen" in Washington, in "Great Days in Great Careers," by Alfred Henry Lewis. David Graham Phillips describes "How Roosevelt became President." There are a number of good vital short stories of real interest.

THE DOCTORS' WORLD.

Therapeutic Briefs, Medical News Items, and Clinical Notes on Medicine and Surgery.

Oysters and Typhoid.—An epidemic of typhoid fever occurred in December in a number of cities in England caused by oysters which were raised in water containing sewage. This has caused a large amount of discussion in England regarding the part the oyster can take in causing typhoid.

Dr. Joseph Adolphus.—Dr. Adolphus died at his home in Atlanta, Georgia, December 9th, aged 88 years. He graduated from the Pennsylvania Medical College, Philadelphia in 1849 and practiced for years in Atlanta. He was a leading eclectic practitioner of the country, and for years was a professor in the Georgia Eclectic Medical College.

He was broadminded in his views and was willing to accept truth regardless of school. He was a frequent contributor to the medical periodicals. The articles which he has contributed to the Recorder from time to time showed his ripe experience gained in a practice of over one-half a century.

Obstetric Don'ts.—It is very necessary for the practitioner to know how to do but it is also a good thing to know what not to do. Dr. T. J. Bell, in the Texas Medical Journal has the following useful don'ts to offer on obstetric practice:

A doctor should never go to a case of labor without his pouch containing everything which he may need in emergency.

If possible to avoid it, never allow a woman to go into labor on a feather bed. Never attend a woman in labor with even a possible danger of infecting her; therefore, while treating erysipelas or any infectious disease, or after handling septic cases, a physician should avoid if possible attending labor cases. The tracks of a careless doctor may sometimes be traced by his frequently having cases of puerperal sepsis, and, what to the patient and her friends, perhaps may appear accidental, is, in truth the fault of the careless doctor. For the same reason a doctor should never touch the vulva of a laboring woman until he has thoroughly scrubbed his hands and arms to his elbows, scraped his finger nails and then bathed them in a solution of bichloride; and don't use a towel or anything to dry the hands until this examination is done, then wash the hands with soap and water, and dry with clean towel, and don't fail to wash the hands and bathe in bichloride before each vaginal examination.

Don't become impatient in first stage of labor because the advancement is not rapid—nature's methods are usually the best, but if the recurring pains are ineffective, not causing the mouth of the womb to dilate easily, and are telling on the patient's strength, better give her a pretty full dose of chloral or morphine and rest the tired creature for a while; but don't endavor to open the canal by force, unless an emergency, such as flooding or eclamptic convulsion, demands it. A slow process in first stage is better than a torn cervix. Don't repeat vaginal examination frequently, nor keep the hand or finger within the vagina but a few minutes at a time, except for reasons which may make it necessary. These examinations tend to dry the secretions

which nature provides for lubricating the parts, and are calculated to irritate the parts and actually, in many instances, to retard labor.

Of course, always be courteous to your assistants, but endeavor to impress upon them the fact that you are the doctor, and never allow them to dictate to the patient how she should lie upon the bed, or how she should hold her head or her hands, or how she must "bear down and help the pains along." Their suggestions are often worse than nonsense, and you are there to know what is best for the patient. Never treat a complaint by the patient in labor, that she has a bad headache, lightly—it may mean something grave later on. Never leave the patient's house, or get out of hearing of her call after expulsive pains are established, or the sac has been ruptured.

Don't be hasty to apply forceps, but don't be afraid to do so when necessity requires—that is, don't allow the woman to go on through hours of agonizing, ineffective pain when she may be harmlessly relieved in a few minutes by using the forceps.

Don't encourage the woman to "bear down" if the expulsive pains are vigorous, when the soft parts at the outlet are made very tense by the child's head passing through them—better insist on her to refrain from bearing down with the pain, and in the intervals between the pains to introduce two or three fingers into the vagina at its posterior angle and press back firmly the posterior commissure, and at same time grasp the head with the fingers of right hand behind and the fingers of the left hand in front and make traction downward and forward; or else slip the blades of a pair of thin, delicate, short, forceps around the head and make gentle traction, lifting the head as much as possible from the posterior aspect—all this to be done between the pains. By thus taking care, you may save many a tear.

After the child is born, don't neglect to make it cry.

Don't attempt to deliver the afterbirih until fifteen to thirty minutes after child is born, except for urgent reasons; at same time don't neglect, during the interval, to keep close watch over the womb to know that it is regularly contracting. Don't make traction by the cord to deliver placenta—you can do it much easier and quicker and more perfectly by the expression method.

While waiting for the fifteen or thirty minutes to deliver the afterbirth, don't forget or neglect to dress the baby's cord antiseptically, and as dry as possible, and don't forget or neglect to have binder put on babe.

When the after-birth has been delivered, don't neglect to keep the womb in the grasp of the hand, through the abdominal wall, for several minutes to insure proper contraction.

Don't allow the woman's clothing changed immediately, especially if she is much exhausted; but never allow her to remain more than a few hours without changing and thorough cleansing.

Don't put the babe to the breast for an hour or so—until the mother has rested awhile.

Don't neglect to see that the babe's eyes are properly cleansed—ordinarily a solution of boracic acid is sufficient for this purpose.

Don't fail to douche the vagina in about twenty-four hours after labor, and do it yourself with proper aseptic precautions. I believe it is, as a general thing, hazardous to delegate this duty to the nurse.

Don't fail to do your whole duty from start to finish, and then don't fail to charge for your services a liberal fee, and collect your bill, and you are then assured of a life-long friend in the person of your patient.

MODERN THERAPEUTICS

Brief original communications and short abstracts giving the latest in therapeutics.

THE NATURE AND TREATMENT OF PRURITUS.

By Robert C. Kenner, A. M , M. D., Louisville, Ky.

Ex-President of Louisville Clinical Association, Honorary Member Muhlenberg County Medical Society, Editor Third American Edition Garrod's Materia Medica and Therapeutics, Etc., Etc.

It is altogether possible that Pandora never dropped to earth a more distressing evil than pruritus. It is true that intense itching will not produce death, but it will drive a patient to actual frenzy. It makes sleep impossible, causes the sufferer to lacerate his flesh, and in other ways it is a most distressing affliction. Pruritus may effect certain localities of the body, or it may be general—affecting extensive areas of the body, or the entire cutaneous surface.

Pruritus universalis—attacking extensive areas of the body or the entire cutaneous field may occur in patients of any age or sex, but it is most frequently seen in those who have some affection of liver, kidney or abdominal organs. Pregnancy and the menstrual epoch are times when this form of pruritus visits some women. Old people also have it without assignable cause.

Pruritus localis attacks certain regions of the body as if by preference. Pruritus ani is the most common form. It is seen in association with hemorrhoids, seat worms in children, eczema and other conditions.

The affection first shows itself near the muco-cutaneous junction and extends forward to the perineum and backwards to the coccyx. It gives most distress when the patient is in bed or in a warm room. It generally comes on at times when the patient is most annoyed by the visitation.

Pruritus Genitalium. This may be seen either as pruritus scroti or pruritus vulvae, and it is frequently seen associated with pruritus ani. The intense itching which these types of pruritus entail is so fierce that often a most pronounced form of induced or artificial eczema is found to coexist.

Patients who have pruritus vulvae or pruritus scroti have attacks on the street, in the theatre, while shopping, etc., and the power to repress the desire to scratch is almost lost. One lady who suffered with severe attacks of pruritus frequently went into convulsions when severe attacks of the affliction visited her on the street cars and other public places.

In both pruritus scroti and vulvae we will find great excoriation and dermatitis as a result of the itching which is induced by the affection.

Pruritus palmaris and plantaris are types frequently seen, but they are generally of a very evanescent character.

Pruritus hiemalis which bears the name of winter itch is often seen. It affects the thighs and calves of the legs and produces the greatest degree of discomfort and distress. It never annoys the patient in summer but visits him when cold weather appears and remains until the return of spring.

The treatment of pruritus will, in order to attain results, have to comprehend remedies which are taken internally to correct any constitutional dyscrasia or disease that is present, and remedies applied locally to counteract the pruritus and subdue the as-

sociated dermatitis. When both of these indications are intelligently looked after we shall attain results that will please our patient But in many cases only local treatment is necessary.

When the patient needs an alterative drug, as is frequently the case, we can get good results from regular employment of extract alterative (Wheeler's). In nearly every case we can get more rapid results by giving the patient Wheeler's calcium and bromide compound. This remedy has a splendid action on all affections of the skin and it also builds up the general health of the patient.

If anaemia or uric acid poisoning or any other disease condition is found associated in the case we shall, of course, have to give such remedies as are indicated to overcome it. The good judgement of the physician enlightened by the study of the case in hand will leave nothing to the imagination.

As a local remedy to subdue the inflammation of the skin there and allay the pruritus there is no remedy which equals noitol. This remedy is the most speedy and effective remedy in relief of pruritus that is known to the profession. It is very prompt in all forms of pruritus, and in eczema it it brings relief and delights the patient. Noitol should be applied to the affected surface with a hair pencil or soft spongue, three or four times daily. In severe cases it should be applied oftener.

C. S.; age 12. This girl had eczema involving her ankle and it was attended with a degree of pruritus that almost drove her wild. She scratched her ankle until it bled and still she got no relief. After she had tried a great many domestic remedies she applied for treatment. Noitol was applied four times daily as above directed. From the first application the itching subsided and after the first day the color of the affected parts showed that improvement was beginning. I thought this girl should have some internal medicine for her blood and one which would exert a tonic action on the skin. She was accordingly given calcium and bromide compound (Wheeler's). This girl made a speedy recovery and has now gone several months without any recurrence of the disease.

Mrs. B. M., age 27. This woman has been attacked with pruritus vulvae at intervals for a year but for the last two months the attacks were very severe and frequent. I attributed the cause in this case to uric acid and told her to correct her diet and take some lithia tablets. I had her apply noitol to the affected parts four times daily. She had scratched so much her parts were excoriated and swollen. Noitol proved to be very soothing and it at once overcame the itching. This woman used the noitol four times daily for a couple of weeks and not suffering and the swelling and tenderness having left her she quit the remedy and has since remained free from the disease. Four months having elapsed since she had an attack.

Mr. H. H. N., age 33. This man, a railway fireman, applied to me for treatment of pruritus scroti. Examination revealed the fact that his scrotum was greatly inflamed and swollen and thickened. He suffered with the fiercest attacks of pruritus and pain.

There was no constitutional disease to account for this inflammation, it being due to irritation and sweating. I had him use applications of noitol four times daily. These were soothing and at once overcame the itching that had caused such great agony. After employment of the noitol for ten days he was entirely well.

Mr. W. H., age 42, a railway conductor had attacks of pruritus ani that came on him often and which rendered him unable to attend to his business.

This man had a scrofulous taint and his general health was not excellent. He was put on calcium and bromide compound (Wheeler's) and this was taken for several months. Noitol at once alloyed the pruritus and cured the associated dermatitis and eczema that was present.

This man now enjoys exemption from pruritus ani and is in good general health.

A VALUABLE ADDITION TO THE PHARMACOPEIA.

If the practice of medicine were to be restricted to three drugs one of them would undoubtedly be iodine, or one of the iodides. Of all the hundreds of attempted substitutes not one has yet been found to take its place. It is about the only solvent and resolvent of morbid tissues, and the only thoroughly reliable alterative known. All the others of any note are based on it, or are direct compounds of it; and the only compounds of it that have gained any permanent recognition are those in which the chemic union is comparatively weak, so that contact with living tissues breaks it up and liberates free iodine.

To nearly or quite all its various compounds these are serious objections. Some of them possess so rank an odor as to be almost unendurable, and when used, publish the patient's malady far and wide, that is, as far as there are any sound or sensitive olfactory organs to be found. Others are so harsh on the digestive organs that their use is definitely limited, when not positively interdicted.

The only principal drawback to ordinary iodine has always been and still is its insolubility, it requiring no less than 5,500 parts of water to dissolve it. Another source of failure in its use has been on account of its liability to be precipitated by the acids of the gastric secretions.

In spite of these drawbacks it stands at the head of the list of indispensable drugs. No system of practice yet exploited attempts to get along without it in some form.

To make iodine soluble, non-irritating and not subject to precipitation in the stomach, has long been a profound study and prime effort on the part of pharmaceutic chemists. Most of these investigators and experimenters have confined their efforts to the evolution of new compounds of this element rather than to a modification of the substance itself. But at last a process has been devised and perfected by which iodine is rendered soluble, non-irritating and not liable to be precipitated by contact with the gastric secretions. This process is a great stride forward in pharmaceutic manipulation, and bids fair to revolutionize the use of this drug.

The new product overcomes all the objections and disagreeable characteristics of crude iodine, while losing no whit of its efficiency as iodine.

It is called Burnham's soluble iodine, and is being supplied to the profession by a company of that name in Boston.

It will be a most welcome innovation to practitioners everywhere, and doubly welcome to the millions who are unfortunate enough to require its unabated therapeutic efficacy.—Dietetic and Hygienic Gazette.

We have been using this preparation in our practice and found all the statements made above to be true. Burnham's soluble iodine is efficient and non-irritating. We advise our readers to send for a sample and try it.—Ed. Recorder.

Lanikol is prepared for physicians' use in skin diseases. Samples are furnished free to Recorder readers.

LORD MACAULAY SAYS EVERY CLINICIAN BECOMES AN HISTORIAN.

Lord Macaulay briefly epitomized history as the "Record of Events." Be it so. The pleasant task of collection and verification of data falls upon the historian, who retells in an interesting and enthusiastic manner the lives and acts of others.

In medical history as in secular the value of an epoch often rests upon the work of the individual, and the true portrayal of one incident in life lends color to the complete narrative. Acts not words illustrate the advance of progress in science and literature.

The desire of one person to know precisely why another individual preferred certain methods to old established forms necessitated history. The narrator of the events of daily life is the true historian and produces items of interest worthy of future history. The construction of records from this material constitutes the validity and worth of the article. What you do and tell today, if approved, your fellow man will perform tomorrow. Therefore the discovery of an aid to the burden of work-a-day life is more important than determining a new chemic element. One helps the masses; the other invites speculation from the few. History thus recites incident. Incident depicts facts, and facts destroy theories, as the following abstract convincingly states:

"We had here a most formidable state of things to deal with: A woman in child-bed, with every indication of septicemia—a double pneumonia, probably of septic origin, with constant pain in hip and lumbar region, with persistent vomiting and diarrhœa, temp. 105 degrees. A large tympanitic abdomen, small wiry pulse, cyanosis with finger nails quite purple. Dr. Tibbetts several times informed me that I could look for a fatal termination, so extreme was the case. * * the best thing to do was to curet, which was done, and followed by hot bichloride douches. * * * no abatement in temperature. Morphine had to be given hypodermically to comfort patient, besides strychnine, cactus, brandy, and digitalis to support the heart's action. Just here I must say that I administered anti-streptococcic serum with very gratifying results. We had also used injections of salt solution. I believe the benefit from these injections was more lasting than from those of serum. Antiphlogistine was applied over hip, lumbar nerves and sciatic nerve. This agent (antiphlogistine) was our mainstay in the treatment of both lungs besides. The abdomen became as large as before confinement, hard and resonant on palpation. Antiphlogistine was therefore spread all over the abdomen. I know of no preparation that has been brought to the attention of the profession of late years deserving of higher praise in all inflammatory conditions, no matter in what locality such may be seated. Poultices have been abandoned by the writer since the adoption of its use."

Puerperal septicemia complicated by septic double pneumonia. Abscess of thigh. Recovery.—C. C. Partridge, M, D., in American Surgery and Gynecology, October, 1902.

Had it not been for antiphlogistine, what would have been the result of the case? Again, had it not been for antiphlogistine, what pleasure would the attending physician have taken in making a public record of his case?

The inference is marked. Here is a patient in extremis with the entire 900 official remedies of the Pharmacopœa at the disposal of consultant and attendant. Every surgical and medical accessory available, and yet one pharmaceutic preparation proves

adequate to the emergency. Demonstrating beyond criticism that antiphlogistine shold be applied in every process of inflamation. That antiphlogistine relieves blood pressure tension by induction of osmossis and dialysis.

A MOST SEASONABLE SUGGESTION.

As the time is fast approaching when there is a demand for cough remedies, it will not be amiss to present a suggestion and a good remedy. In place of opiates which always dry up expectoration, disturb digestion, cause constipation, and render the patient uncomfortable and drowsy, it is desirable to employ the most efficient and popular cough sedative of the present day, namely; antikamnia and heroin tablets. This remedy stops cough by its soothing effect upon the air passages, but does not interfere with expectoration, and, in fact, renders it easier by stimulating the respiratory muscles. Only a very small dose, one tablet, every one, two or three hours, for adults, is required to produce a satisfactory result.—Notes on New Pharm. Products.

PASSIFLORA INCARNATA IN WHOOPING COUGH.

Dr. Carties states that passiflora incarnata a remedy little used in whooping cough serves well for sleeplessness, spasms and certain nervous phenomena. Frequently when lying down at night the attacks are worse, and hyoscyamus, belladonna and conium will not serve as well as passiflora; five drops of the tincture at bedtime.

Another plan is to give two drops of the tincture immediately after each attack until the total quantity taken in the night is from six to twelve drops. The preparation of the tincture is important—it should be made from the wild plant and not the cultivated variety. To be sure you obtain a reliable article, ask for Daniel's conct. tr. passiflora incarnata. There is the same difference as between the aconite of the mountains and the garden variety.

TREATMENT OF DIPHTHERIA.

To briefly relate, this is the way I treat diphtheria, and I have never lost a case. If I can get perfectly fresh antitoxine I give it, but if it can not be had perfectly fresh I do not. Whether antitoxine is given or not, I give ecthol in full doses appropriate for the age of the patient, every three hours, administered by the mouth. The entire fauces, larynx, and pharynx are sprayed with a mixture of ecthol and peroxide of hydrogen, three parts of the former to one of the latter, every fifteen to thirty minutes. Calomel in small doses is administered every hour until the bowels are thoroughly moved. Nourishing and supportive diet is given at short, regular intervals, and everything done to make the patient comfortable in the way of supplying fresh air, etc. I have been using this plan, modifying it to suit the needs of each individual case, for several years, and cannot recommend it in too glowing terms to my fellow practitioners, knowing that it will give good results and entire satisfaction if it is carefully and effectively administered and carried out. Nothing can save a patient in articulo mortis, and it is needless to try this in such cases hoping to do something.—Dr. J. W. Pearce, in American Practitioner & News.

In 1902 over 3,500 persons in the United States reached the age of 100 years. Longevity in this country is increasing.

BRIEF MENTION.

Tuberculosis costs the people of the United States $330,000,000 annually.

Naphey's medicated uterine wafers cure many of the diseases of women. Samples free to Recorder readers.

The Index Medicus will be published again. The Carnegie Institution will publish it and Dr. Robert Fletcher will be the editor.

Triacol is a preparation which every physician will find valuable. We advise our readers to send for samples and literature and investigate its merits.

Keep your instruments sharp. The easiest and quickest way is to buy and use one of the dry hones made by E. A. Harrington, Waukesha, Wis. Surgeons say they are great.

If you are not successfully treating epilepsy it will pay you to write to Dr. W. Towns, Fond du Lac, Wis. He will tell you about his successful treatment which you can use.

The special preparations made by T. C. Morgan & Company, of New York, are very valuable. Their sabalol spray and sabalol throat tablets are especially valuable. Samples are furnished free.

You have read a great many unsolicited testimonials concerning the merits of hematone, diastalin. and zematol. Don't you think you had better try them? They have proven of great value to others and will undoubtedly prove useful to you.

I find aletris cordial to be an excellent and palatable preparation. I have used it in cases of dysmenorrhea, irritable ovary, uterine congestion, leucorrhea and endometritis, with the best of results. In a case of irritable ovary, that had resisted all treatment for four years, I prescribed aletris cordial, and after taking for four days, the pain was entirely relieved.—T. R. Dice, M.D., Utica, Mo.

Dr. Hamilton Forline, of Chicago—sanatorium at Western Springs, Ill.—reports results as follows: Cerebral embolism with large area of softening. Hemiplegia. Very markedly impaired mentally. After three months' use of the Roberts-Hawley special lymph-compound administered subcutaneously, together with the supra-dural injections administered twice weekly, the patient has improved decidedly in mentality and hemiplegia has disappeared almost entirely.

The following suggestion we find in the Canadian Druggist. We should like to have some of our readers try it and report results: Chloral hydrate may be used as a substitute for cantharides plaster if the former be spread upon diachylon plaster and then applied to the skin in the usual manner. The application first produces a feeling of warmth, followed by a burning sensation, and in 30 minutes a blister is formed exactly as after the use of cantharides and there are no ill-effects from the use of the chloral hydrate application as there are from cantharides.

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LEADING ORIGINAL ARTICLES.

FISTULA IN ANO.

By Charles C. Miller, M. D., 100 State Street, Chicago.

We now come to the consideration of the treatment of the most serious form of rectal abscess, the pelvi-rectal. Avoiding extensive quotations I would say that the former teachings regarding the treatment of this condition can be briefly summarized as follows: The diagnosis having been made, the patient is to be placed in a position which gives good access to the buttock, the finger is to be introduced into the rectum and the pus located, as nearly as possible, then with a long narrow knife an attempt is made to carry it down into the pus, at a single thrust, irrespective of anatomical structures or parts. Now this is a plausible and easy way to operate upon paper, but it is not to be commended for practice. While it is true that anatomical structures of importance may escape the surgeon's thrust, there are other features, which are not to be overlooked. In the first place such an incision makes no provision for hemorrhage. While an uncontrollable hemorrhage is not going to be excited, still it is to be remembered that there are large vessels in the neighborhood of the rectum, and the cutting of several of these in the thrust will not fail to excite a free hemorrhage. The worst part of such a hemorrhage would be the difficulty of finding and closing such divided vessels in a wound of this nature. It is a simple matter to catch a vessel, when it is spouting before you, but anything rather than simple, when the hemorrhage is filling a wound, as fast as it can be mopped out. Not only this, but at the deepest part of the wound, we are going to have the freest bleeding, for in the neighborhood of the abscess all the parts are inflamed, and as a consequence the vessels much dilated, and the circulation greatly augmented.

In the buttock there happen to be no structures of great importance, but above the levator ani and in close proximity to the bowel, are important anatomical structures. In attempting to carry a long bladed knife into a deep abscess, it is but reasonable to suppose that any such structures would be jeopardized more or less, and we can safely suppose that they will be jeopardized to no little degree.

Owing to these circumstances, it is my own belief, that we can only approach and open a pelvi-rectal abscess from below by a careful dissection. In

this dissection, we are to carefully check all bleeding, as we divide the vessels. As we go successively deeper, it must be with a field free from blood before us. The vessels need not be tied, merely clamped with small pressure forceps. The skin and subcutaneous tissues are to be freely divided and retracted. Below this our dissection is to be as much as possible a blunt separation of the structures, cutting only when our field is unduly hampered. In this way with a minimum amount of injury to the parts, we can reach our pus and evacuate it.

In some instances a straight incision can be better superseded by one which is more or less curved. In some this curve can best be made partly encircling the bowel, and just at the outer margin of the sphincter. In fact such an incision will in a majority of cases prove the best. Where the pus is situated anteriorly, it will often be best reached through a straight or curved transverse perineal incision.

A greater number of the pelvi-rectal abscesses will be seen after the abscess has discharged into the bowel. If there is no reaccumulation of the pus, an external incision is not to be made. It will hardly be possible to find the opening through which the pus made exit into the bowel so that but little is to be done, unless the discharge is thick and tenacious, when it is advisable to give the patient frequent rectal irrigations with some non toxic antiseptic to prevent an irritation of the mucosa, whlch might result in an annoying proctitis.

Having opened our pelvi-rectal abscess, we have not finished with the case. The cavity is to be irrigated with an active antiseptic, a solution of carbolic or bichloride, and then having mopped it dry, it is to be lightly packed with iodoform or plain gauze, and a small rubber drain placed among the strands of gauze emerging from the wound. Over it all is to be placed a large pad of cotton, and all bandaged in place. As a rule the dressings will have to be changed every twenty-four hours for the first few days. Before each renewal, the wound and the cavity of the abscess should be irrigated with the antiseptic solution.

Now and then we will see cases where the patient has suffered a pelvi-rectal abscess which spontaneously ruptured into the bowel, and apparently for a time discharged freely. Then the discharge became scanty or discontinued for a time only to reappear to the annoyance of the patient. This is a condition due to one thing, that is the rapid reparative power of the gut in this region. The orifice of the abscess heals over. One thing is needed for a cure. The opening into the bowel must be found and opened as freely as possible, and then if this is not done freely it may close before it has drained the abscess cavity sufficiently, so that you must tell this patient one thing, and that is while you can cure him by an operation, that it may not do so at the first trial. In this way in case of failure at the first effort, he will not feel that it is useless for him to submit to a second operation. As the opening will be several inches within the bowel, it will be necessary to freely divulse the sphincter ani, as a preliminary measure to searching for it. This procedure should be done entirely by the fingers, and should be gradually accomplished. Where this procedure is carried out entirely with the fingers a complete atonic condition of the muscle can be secured without endangering its integrity, something which cannot be said of instrumental divulsion.

When the opening has been found in such a case, as previously mentioned, it is to be explored with a grooved director. The director is then to be used as a guide for the splitting open of the cavity, and then if accessible

and possible the edges of the opening are to be trimmed away. Thus we can better insure the opening persisting until the cavity has been sufficiently drained.

What are we to do where a true pelvic abscess ruptures into the rectum? Nearly all of these wifl be found in women. Drainage through the rectum will be insufficient in a larger per cent. of the cases. What is to be done per rectum? We can safely say, nothing. But many times in the female we can attack these from below, through the vagina. If any signs of fluctuation can be elicted through the vagina, this should be the route of attack.

Now the opening of the pelvic abscess has been condemned by way of the vagina. The cry has been that it gave an incomplete cure. This statement is true, but the method is accompanied by but little danger to the patient. The attack from above of a pelvic abscess is of necessity going to be accompanied by a large mortality. Owing to this it is better while the pus is virulent to secure its escape from below if possible, and then if the patient is not entirely cured, when the process has abated, an opening above can be made, and any damaged parts treated according to the indications of the individual case.

Now in the last two forms of abscess we are going to be brought to face something which did not attend former varieties of abscess. That is in these cases we will find a suppuration, which is extensive, and as a result the patients life may be in danger. This raises the question as to how we shall judge a patient's condition where a suppurative process is acting. We know in these cases the temperature varies widely, clearly it cannot guide us. The general appearance of a patient too is misleading in such a condition. His mind may be clear and he may be in good flesh, yet be at death's door nevertheless. There is one reliable guide, that is the pulse: It must be watched closely, and action taken according to its indications.

We have considered the various causes of minor forms of abscess, their course and treatment. then we gave our attention to the cause, course and treatment of the larger varieties. In considering the subjects all useless verbiage and discussions and recitations of the histories of cases have been avoided, and the attempt made to merely give details of value to those who wish information which can be applied in actual practice.

Tuberculosis remains to be considered as a cause of rectal abscess and fistula. In this respect the action of the germ has frequently been considered the cause of this condition, where in fact such was not the case. Owing to this surgeons of today are seeing far less frequently fistulas which they attribute to the tubercle bac illus.

CEREBRO-SPINAL MENINGITIS.

By M. A. Blanton, B. S., M. D., Baileyton, Tenn.

As cerebro-spinal meningitis usually occurs in winter and early spring, as one of the most painful affections with which the physician has to contend in his daily practice, a review of the symptoms, diagnosis and treatment might be considered reasonable at this time. It is an acute infectious malady, apparently dependent on the activity of the meningo-coccus, which is present in the fluid obtained by lumbar puncture, in the exudate and the blood. Overcrowding, filth and other unsanitary conditions are predisposing influences. The disease varies much in its clinical manifestations but is generally characterized by decided dis-

turbances of the cerebro-spinal functions. In some cases spinal, in others cerebral manifestations predominate. A characteristic eruption is a marked feature in about fifty per cent. of the cases.

The attack usually sets in suddenly, although it may develop insidiously. There is rigor, followed by fever, malaise, great thirst and vomiting, often with a clean tongue and no gastric derangement. There is also vertigo, excruciating remittent headache, rigidity of the muscles of the head and neck, sometimes passing into opisthotonos; muscular twitchings and convulsions, dryness of the skin with hyperaesthesia and paraesthesia, intolerance to light and sound; also tinnitus aurium. The expression is anxious, the pulse is rapid and extremely irregular, the temperature varies between wide limits, so that hyperpyrexia is frequently seen. The temperature may continue to rlse even after death. A sudden fall of temperature may indicate collapse and death; a gradual fall of temperature precedes recovery. When the thigh is placed at a right angle with the trunk the leg can only be partially flexed. Kernig's sign, not pathognomonic, but often present, is the inability to straighten the knee in the sitting posture. The action of the sphincters are often deranged, so there may be incontinence of urine or feces or retention of urine and constipation. Generally retention is an early, incontinence, a late symptom. Between the first and third day purpuric spots that quickly become petechial may appear on the trunk and extremities. From the character of this eruption the disease is sometimes called "spotted fever". Herpetic vesicles may appear about the sixth day on the face and lips. The pupils, which are at first contracted, become dilated in the further progress of the disease. Disturbances of sight and hearing, perhaps blindness and deafness develop. As death approaches there is difficult breathing and swallowing. The breathing may assume a Cheyne-Stokes type. Short remissions in severity of symptoms may occur, to be followed by renewed exacerbations. The fastigium is commonly reached on the sixth day. However, the duration is variable. Death usually takes place in coma, exhaustion or apnoea. In addition to the ordinary type, there may be fulminant cases, death occuring within twelve hours; mild or abortive cases and protracted or typhoid cases. Sporadic cases sometimes occur.

There is a possibility of confounding this disease with tetanus, typhus, typhoid and yellow fever; also torticollis, but if the diagnostician will keep in mind the various symptoms afore cited, the knowledge of an epidemic, the sudden onset, the violent headache and vertigo, the retraction of the head, the delirium, eruption, irregular pulse and temperature, he will generally be wafted beyond the possibility of a mistake in diagnosis.

The treatment has varied much with the advance made in medicine. The practice of bleeding for this affection was, I think, a very grave mistake, and is now one of the past dogmas of the old time practice, which was bound to lower the vitality of those patients suffering from this complaint. Leeches applied over the mastoid, ice cap to the head, lumbar puncture for the relief of intracranial pressure, calomel given at first to purge, later combined with iodide of potash to absorb the exudate. Morphine, bromide and chloral are variously combined to depress the reflex centers and lessen the amount of blood in the brain. Ergot is also recommended by some to contract the blood vessels.

The following is most successful in my hands: When I see the patient early and find that constipation exists, as is the rule in this disease, I give at once ¼ to 1 drop of oleum tiglii in

syrup acacia, which will generally act freely without producing any exhaustion to my patient. A blister of ceratum cantharides from 1½ to 2 inches wide is placed the entire length of the spinal column, and I see that it raises a uniform blister the entire length. This will soon lessen the congestion and relieve the intense headache. After the bowels have acted freely I put my patient on aconitine and veratrine, $\frac{1}{134}$ grain, one each every half hour until defervescence sets in; then less frequently. Atropine sulphate, $\frac{1}{500}$ grain, and hyoscyamine, $\frac{1}{250}$ grain, one each every two or three hours to dilate the periphery and relieve central congestion. Morphine or codeine pro re nata. In the stage of convalesence I use quinine or quassin as a tonic and whiskey as a stimulant. Complications and sequelae are treated on general principles.

WATER ANALYSIS.

By J. L. Wolfe, M. D., Cedar Falls, Iowa.

Of the numerous substances found in waters, it is now generally admitted that only those of organic origin are a serious source of danger, and that by far the greatest risk is incurred in using water liable to contain living organisms, which, when introduced into the system, are capable of producing specific diseases. Of the presence or absence of such organisms, chemical analysis can give us no information. The presence of organic matter may be chemically demonstrated, but inasmuch as its nature, whether poisonous or innocuous, is beyond the power of the analysis to reveal it, is obvious that a mere chemical analysis may often be worthless, or even misleading.

This point cannot be too strongly emphasized since the popular impression that the chemist by performing a few mysterious experiments with water in his laboratory, can pronounce at once whether it is pure or impure, safe or dangerous, is shared alike by the ignorant and the learned, and should be dispelled. This opinion has been, and continues to be, fostered by analysts who rarely hesitate to pass judgment upon a water from the determination of the chlorides, nitrates, phosphates and ammonia of the organic carbon, and nitrogen of the oxygen consumed, and of the ammonia derivable from the organic constituents.

All these factors are of more or less importance as an index of the degree of pollution, recent or remote; but their real value can be assessed without some previous knowledge of the source of the water. The inorganic constituents can easily be determined and, whether either in quality or quantity, they are objectionable, the chemists may safely express an opinion. They are, therefore, chiefly of interest to us in so far as their presence tends to throw light upon the source of the organic matter, which in greater or less quantity is always presented. Only under certain circumstances has the determination of chlorides any significance, and pure water from some sources may contain a larger amount of chlorides than the same water when contaminated. The amount of nitrates which would condemn a water from one source, may be absolutely without significance in a water from another source.

In reputed good water, it has been observed that the micro-organisms present capable of liquifying gelatine by their growth, are few in number; while in sewage-polluted water they abound in great numbers. But this fact is of but little value, since it only enables somewhat gross pollution to be detected, and most of these liquifying organisms are perfectly harmless.

Bacteriology, like chemistry, may

tell us something of impurity and danger, but neither can be depended upon to determine with certainty whether a water is actually injurious to health. The possibility of occasional pollution is a point too often overlooked; yet, it is to such accidental pollution that outbreaks of disease are most frequently attributed, and of the liability to this, the examination of samples of water prior to the occurrence of the contamination may tell us little or nothing.

The danger of such pollution does not unfortunately vary with the amount of any constituent found in the water of great chemical and bacterial purity and may be more liable to occasional fouling than a source yielding water containing excessive quantities of chlorides and nitrates, unoxidized organic matter, or even living organisms.

Bacteriological and microscopical examinations, as well as chemical analysis, must therefore always be associated with a thorough investigation of the source of the water, to determine the possibility of contamination, continuous or intermittent, and a guardedly expressed opinion given only after a full consideration of the bearing of the one upon the other.

When a water is known to be fouled by sewage, or known to be liable to such pollution, any form of examination is superfluous; and as neither bacteriology nor chemistry can be depended upon to prove that a water is free from all dangerous pollution, such examinations are in many cases quite useless.

With the discovery of the fact that such diseases as typhoid fever and cholera are due to the introduction into the system, not of dead organic matter, but of living organisms, faith in the chemical analysis of water began to be shaken, and will remain so until more positive facts are presented to prove that it is sufficient.

CEREBRAL BUBBLINGS.

By Ralph St. J. Perry, M. D., Farmington, Minn.

Professor of Genito-Urinary Diseases, University of Minnesota.

Ignorance and superstition are the two greatest enemies the doctor has to contend with.

The remedy should fit the case as one side of a box dove-tails into the other.

Every wide awake doctor should know what other doctors are doing; read current literature and go to the society meetings.

Cumulative results are what make the practice of medicine profitable.

Perseverence means three things: First, to take hold; second, to hold on, and third, never to let go.

One remedy well understood is worth two of which your knowledge is smattering.

A knowledge of medicine is a good investment, but a poor speculation.

The hemorrhoidal tumor, like some laws, is more observed in the breech than otherwise.

Don't wait until the post mortem to study up your cases.

You cannot judge a surgeon's success by the amount of his talk.

Theory without practice is mere prattle.

Faith is the foundation of medicine.

The building up of a successful practice requires time and study. There is no escape from these two essentials.

Good drugs do not always produce results, and poor ones never do.

The physician is not a luxury but a necessity.

A smile often sweetens the medicine.

Gray hairs are often more respected than knowledge.

One little pill may make or lose a patient.

NOTES FROM EXPERIECE.

By H. A. Giltner, M. D., Lexington, Indiana.

A splendid treatment for an ordinary cold is 3 grains of dover's powder combined with 2 grains of acetanilide in capsule; one such dose given every four hours. I sometimes double the dose at bedtime in addition to the regular dose.

The best remedy for pruritus to be used locally is menthol and olive oil, 20 grains to the ounce. This is a specific for the so called "chigger" bite which is met with in many localities.

In cases of torpid liver with enlargement and jaundice use massage twice a day over enlarged organ and give tablet triturates of calomel, ipecac and soda every second day.

Nothing can be superior to salol in typhoid and malarial fevers for keeping down meteorism nor in the gaseous distension of stomach and bowels so often met with in children.

Codeine is unexcelled for headache, mild pain anywhere and for troublesome, useless cough. It may be given in doses of from ⅛ to ½ grain, repeated every half to two hours.

Use potassium permanganate 10 grains to the ounce for tonsilitis, used as a gargle every four hours.

For nocturnal incontinence of children use atropine sulphate 1 grain to 2 ounces of water. Give one drop for each year of the child's age at 4 o'clock p. m. and again at bedtime. If dilation of pupil is caused lessen the dose.

Acetate lead 8 to 10 graains to the ounce of sweet spirits of niter applied locally is best treatment I have ever found for ivy poisoning.

For muscular rheumatism and those undefinable pains often met with in the back and other muscles of the body I use

℞ Sodium salicylate, ʒiv
Saturated solution acetanilide in alcohol, ℥ss
Citrate caffeine, gr. x
Codeine sulphate, gr. ij
Aquae q. s., ℥iv

M. Sig. Teaspoonful every three hours till pain is relieved, then three or four times a day.

I have been treating a case of simple goitre in a girl 14 years of age with thyroids and electricity for nearly a year with only slight results.

Too many articles are written recommending proprietary remedies in nearly all medical journals. If one feels like it; it is all right to do so, but when every number of a journal "happens" to contain an article in favor of a certain remedy it looks very much as though the manufacturers had something to do with it.

Proprietary remedies were not introduced to fill a crying need or for intrinsic value, but to fill the coffers of the advertiser. Let him, and not the physician, bring his remedy before the public.

THOUGHTS.

By C. E. Boynton, B. S., M. D., Los Banos, Cal.

Does any one deny that more married men and more single men for that matter patronize prostitutes and any other women of easy virtue every year?

Let any man ask himself how many married men would act the part of a Joseph if tempted by any enchanting female.

Let any man ask himself how few wives would yield to similar tempters or be even tempted in similar situations.

Does not the matrimonial yoke seem uneven when the male is so ready to

escape its confinement and the female does so only rarely, comparatively speaking.

Will not this unbalanced state of matrimonial responsibility tend to cause the wife to look upon wifehood as a sort of slavery? Is it not common sense to say what is fair for one is fair for the other also?

If "variety" in married life is becoming more popular for the man should it not also in fairness become more popular for the woman also?

But some one will say two wrongs will not make a right; remember that neither will one wrong, increasing for that matter, make a right.

If the variety sex relation becomes nearly universal among men how long will women occupy the slave's place into which she will be crowded? Is such to be expected of her?

Look and think into the future. What will be man's sex relationships in fifty years?

The writer asserts nothing, he has merely written a few questions. All are welcome to give their thought.

In a prominent San Francisco hospital strong cups of coffee are given to each patient every two hours if desired. This is scientific!

A prominent specialist urges nearly all his patients to take wine at meals.

A neighbor has been smoking cigarettes day and night. He is consumptive. At last I urged him to quit and he took a pipe, smoked before breakfast and complained about his stomach—a lump—tobacco lump. Arteries are thick. Moderate drinker but says he has just quit, yet is down in the dumps. Were he to go to some "scientific" M. D. in the city there would be a long and awful diagdosis; if he had the money possibly an operation, yet alcohol and tobacco started all his woes and even now if they were quit there might be a ray of hope as to curing the consumption.

A "scientific" M. D. that backs up the tobacco and liquor trade is the gilt edged intellectual monstrosity of modern time, and a hospital that loads up its patients with the xanthin bases—caffein—knows its business.

PERTUSSIS.

By Edw. C. Rothrock, M. D., Philadelphia, Pa.

In the treatment of whooping cough nearly every drug in the pharmacopeia has been mentioned, more so perhaps than in any other trouble. The treatment depends much upon the age of the child, the condition existing in each case and the intensity of the disease; how many and character of the paroxysms the patient has in a given time. Does he vomit and what does it consist of? Is food that is retained digested? What is the condition of his bowels? Is he emaciating or increasing in weight? Any hemorrhage? Is there any fever? Each case must be studied separately. Fresh air, sun bath, oxygen, ozone, is one of the greatest factors in relieving or modifying the cough, but when the weather is bad, rain or cold weather, there should not be injudicious exposure. Care must be taken not to allow the child to contract fresh cold. A great many children are lost by carelessness and by complications arising from such inattention, more than from whooping cough. If the weather is mild and the condition of the child permits, it should be out in the fresh air several hours each day; in fact, in country places the child could be out all day. As to dress, it should be according to the season and time of day, it should be comfortable, to protect from cold and damp and not too heavy in warm weather. Flannel should be worn

next to the skin, particularly in young children. It may be needless to say that isolation should be attended to as a preventive of contagion. The child should not be subject to dust, as arising from sweeping floors, smoke, tobacco smoke, or to the cooking of some articles of food, the odors of which are unpleasant. In some cases the food is vomited soon after it is eaten before it has time to digest, necessitating feeding again, which is important to keep up the vigor of the system. Concentrated nutrition will have to be resorted to In some cases, as malt extracts, beef, cod liver oil and other restoratives, which relieve, maintain vigor and aid in recovery. Nutrition must be kept up and is of very great importance in whooping cough. Complications frequently arise as bronchopneumonia, congestion of brain, prolapse of rectum, etc. Enlargement of the bronchial glands is a frequent sequal. The cases producing recurring paroxysms of cough, induce belief of recurrence of whooping cough. In such chronic cases, iodide potassium is prompt to cure. During the paroxysm of coughing epistaxis sometimes occurs, and in a few cases I have been under the necessity of plugging the nostrils. In some cases blood will gush from nose and mouth.

Expectorants are indicated in the first stages, catarrhal, and frequently throughout the disease in small doses to increase osmosis from bronchial mucous membrane, increase secretion, lower blood pressure, as antimony, ipecacuanha, lobelia, etc. Stimulating expectorants are eliminated from the system greatly by the bronchial mucous membrane, stimulating the vagus nerve filaments, facilitating expectoration, increasing blood pressure, as ammonia, squills, senega, turpentine, etc. The chloride of ammonium and carbonate of ammonium, with gum acacia are very useful in whooping cough, causing expulsion of bronchial mucous by reflex excitation of tracheal and bronchial ciliary excitants. In the convulsive stage resort must be had to sedatives to allay spasm in paroxysm of cough and dyspnea, relieving irritability by acting on respiratory centre and nerves of respiration, vagus filaments throughout the pulmonary tract, as belladonna, cannabis indica, codeine, passiflora, conium, etc. From these remedies we all have favorites that we choose to suit existing conditions. I only use sufficient drugs to relieve and cure, if one drug does not accomplish it another is used. I would not want it understood because so many remedies are mentioned that an indiscriminate use should be made, or that a drug store should be made of the stomach. In the first state I have found this effectual:

℞ Acetate syrup sanguinaria, ʒiij
Tr. ipecac, m xxiv
Syrup tolu, ʒiij
Mix. Sig. Child of 6 months, 5 drops; 10 years of age, 20 drops every 2 hours.

If a more stimulating expectorant is needed then:

℞ Acetate syrup sanguinaria, ʒiij
Syrup squills, ʒiij
Ammonia chloride or ammonia carb., gr. xlviij
Syrup acacia, ʒiij
Mix. Dose as above.

For pulmonary sedative to relieve paroxysm of cough and dyspnoea:

℞ Belladonna, spec. tinct., m xxiv
Bromide sodium or ammon., ʒiij
Syrup tolu, ʒiij
Mix. Dose, 5 to 20 drops.

Grindelia robusta is a splendid remedy, as it has a special affinity for the

pulmonary organs. One of the best mixtures is:

℞ Tr. grindelia robusta, ℥ss
Spts. vini rect., (90°), ℥ss
Acetanilid, gr. xxiv
Syrup acacia, ℥iij

Dissolve acetanilid in the alcohol. Mix. Sig. Child one year old 10 drops, 8 or 10 years, 20 to 25 drops every 2 hours.

I have given coal tar remedies ½ to 2 and 3 grs. as to age frequently with good success, and they act well in cough and fever. They will do no harm if carefully used in small doses and are prompt to relieve in some cases. Bromoform 2 to 4 drops acts well sometimes, although I have used it but little. Ichthyol, 10 per cent ointment rubbed on front of neck thoroughly has good effect. Inhaling ichthyol, one teaspoonful to water 4 to 6 ounces is useful. Belladonna is very useful to overcome spasm and cerebro-spinal congestion in whooping cough. Gelseminum is useful in spasm, but should be given with care in weak heart or not used. I never use opium in this trouble but have used codeine which frequently acts well. It should be used in small doses $\frac{1}{100}$ or $\frac{1}{200}$ gr. to $\frac{1}{32}$ gr. as to age.

In vomiting, oxalate cerium relieves; it has a sedative effect on the pneumogastric nerve and stomach. Sulphocarbolate sodium is also good for the vomiting, so is menthol $\frac{1}{4}$ to $\frac{1}{2}$ gr.

A few hints may be of value to suit existing conditions. Hepar sulpher is good in a dry, hacking cough with pain in trachea and bronchi. Phosphorus acts well for hoarseness of voice and alternated with ignatia in irritation of trachea and nervousness. Hyoscyamus is very useful in a loose, tickling cough in doses 1 to 2 drops spec. tr.

These two prescriptions are good and I have used them with benefit in many cases of whooping cough:

℞ Cochineal, gr. x
Bicarb. sodium or potassium, gr. xij
Brom. potassium, gr. xvj
Tr. belladonna, m xv
Comp. tr. cardamom, ℥j
Aqua cinnamon, ℥ij

Mix. Sig. 20 to 30 drops every 4 hours.

℞ Hydrocyanic acid, dilute, m xv
Tr. ipecac, ℥ij
Syrup tolu, ℥ij
Aqua, ℥ij

Mix. Dose, 10 to 20 drops every 3 or 4 hours.

Drosera is a remedy which is very useful in the treatment of pertussis. It is especially valuable in cases marked by violent paroxysms of loud and harsh coughing, often followed by bleeding from nose and throat and by vomiting. The following combination I have found good in such condition:

℞ Fld. ext. drosera, m v
Fld. ext. ipecac, m v
Tr. nux vomica, m v
Aqua, ℥iv

M. Dose, 1 teaspoonful.

Passiflora incarnata has given some especially pleasing results in treating this disease. It is antispasmodic, sedative, tonic and eliminative in its action. One advantage of the remedy is that it can be given frequently with perfect safety. The dose is one teaspoonful of the concentrated tincture every one, two or three hours, as needed.

When the mucous is tough and hard to raise sticta pulmonaria loosens and relieves the cough.

℞ Sp. tr. sticta pulmonaria
Sp. tr. yerba santa, aa, ℥ss

M. S. 10 drops every 2 hours.

If the spasmodic effort is unusual the child can inhale a drop or two of amyl nitrite.

Rundschau.

By H. Speier, M. D., Rochester, Minn.

TREATMENT OF SEPTICEMIA BY INJECTION OF FORMALDEHYDE.

The lay press has given great prominence to what it is pleased to consider a new discovery in medicine, the successful treatment of septicemia by intravenous injection of formaldehyde. Only two cases are on record so far. The first, a negress, admitted to Bellevue Hospital on the eighth day after having given birth to a child, in an advanced state of puerperal sepsis. Temperature rose to over 107 and the case looked hopeless. Dr. Barrows then, as a last resort, injected into the veins of her arm 500 c. c. of a solution of formalin 1 to 5000. The effect was wonderful; temperature began to fall promptly down to 101. After a few days, owing to a new rise of temperature and the bacteriological examination of the blood still showing the presence of streptococci, a second somewhat larger injection was given. Within a few hours temperature fell and pulse dropped to normal. Just such favorable results were obtained by the same treatment in another case of septicemia at the Hahneman Hospital.

The physician cannot form conclusions from two cases. The new idea will be given a complete trial everywhere. Should it prove true to the hopes raised, should it be demonstrated that antiseptics can be introduced directly into the blood so diluted, as not to be harmful to the body, and yet sufficiently strong, to either destroy pathogenic bacteria, or at least inhibit their toxic activity, until the system can sufficiently rally its powers of resistance, then illimitable prospects have been opened up and we stand indeed at the dawn of a new epoch in medicine.

ANOTHER FUTILE ATTEMPT AT MEDICAL LEGISLATION.

On January 29 the New Hampshire legislature defeated by a vote of almost 3 to 1 a bill prohibiting the practice of Christian Science or of mind or faith cures in healing. It is to be regretted that the bill was introduced by a physician. But probably no one else could be found in the whole state willing to do such a thing. A crushing defeat of the measure was inevitable, for the American people love fair play. This sort of thing is sure to act as a boomerang. Place anyone before the public in the light of a martyr and the public will take his side. The unreasonable fight made formerly by the regular profession against homeopathy was to a great extent responsible for the financial successes that school has been able to score. Since time immemorial sumptuary laws have been failures. Men can no more be made reasonable than virtuous beings by law. Physicians ought to recognize it and refrain from such foolish attempts as the one referred to, which only make us ridiculous and raise up enmity against really meritorious moves. Give the rational and dangerous fads rope enough and they will hang themselves.

ALCOHOLISM AND GLYCOSURIA.

Prof. Robert Saundby, of Birmingham, England, whose name for a decade or more has been closely asso-

ciated with the study of glycosuria in all its various forms, has recently reasserted a view previously announced by him. He claims that alcoholism is a potent factor in the causation of glycosuria. Other noted authors, as Pavy, Senator, Tyson, von Noorden, do not agree with him. But Saundby brings forward quite an array of material in support of his view. He quotes the investigations of Krehl on the effect of beer drinking in students in Jena, also Struempell's deductions that the abuse of alcohol reduces the sugar assimilating functions. These observations, in common with Saundby's own, call attention to the fact that much beer drinking frequently leads to glycosuria, either the temporary, alimentary form, or a graver, permanent diabetes. One may almost be justified, in the absence of the ordinary causes of glycosuria, when sugar appears repeatedly in a man's urine, to assume over-indulgence in alcohol. The matter is of particular interest for the life insurance examiner.

CRITICISM OF STATE BOARDS BY AN AUTHORITY.

Little has been heard of late of a matter which for two years occupied much of the attention of the medical public and press. Let us hope that the movement for interstate medical reciprocity is not dead, but that quiet and effective work is being done towards its realization. There is no need of going over the subject again. The necessity for reform has been widely recognized, a cry for relief from the unjust discriminations arising out of the different medical practice acts has been heard from all parts of the Union. It has been charged that most of the complaints have come from the old fogies, backwoods doctors, graduates of inferior colleges; in short, poorly educated men, who dared not take an examination by a state board. That may be true. But really the most unmerciful criticism emanates from Dr. Aloysius O. J. Kelly, a member of the faculty of the conservative old University of Pennsylvania, and form the sole subject of the address in medicine which he was invited to deliver before the last meeting of the Medical Society of the State of Pennsylvania. What he said was not new, but done so thoroughly and in such a racy style, that we wish we could give it to our readers more fully, than space allows. Few will disagree with him in the assertion that "the motives that actuated the profession in calling for the establishment of the medical boards were the highest in morals and ethics; that, however, in many respects the results have been directly opposite of those contemplated," and "that the laws in reality are exceptionally prohibitive to the reputable physician, but in large measure inoperative against the quack." In his opinion state board examinations are defective for three principal reasons: (1.) In the inaninity and asinity of some of the questions asked. (2.) In the fact that the examinations are wholly written and thus of no value whatever in determining the practical ability of the examinee, although they are of service in furnishing evidence of book learning and of good or bad memory. (3.) In the fact that precisely the same examination is required of the reputable physician of many years' standing as of the recent verdant graduate." He is quite severe on boards, charging them with "a manifest disposition to be unfair and an absence of judicious discrimination," and says many questions are "ambiguous, unfair, inane or asinine." That is pretty strong language, but fully justified by the numerous examples of questions he gives us. Pity the man, not a recent graduate, who has got to go up against that sort of thing! "I should not deem unfitted

to practice medicine the man or woman unable to answer correctly such questions." "Written examination should be replaced in part by practical tests." "It is unjust to compel the reputable practitioner of some years' standing to undergo an examination in theoretical and technical subjects that he has long since forgotten, that he may really never have known well, since years ago even in the best schools certain subjects, measured by present day standards, were inadequately taught, or not taught at all." When men in leading positions, whose motives cannot be impugned, begin to say such words before large and representative bodies, then there may be hope for reform.

GASTRIC ULCER.

The annual meeting of the German Congress of Internal Medicine is always of great interest, for it brings forward the most advanced medical thought. At the last one gastric ulcer formed a subject of discussion, led by Prof. Ewald himself, who has observed 1,080 cases in the last ten years. He was struck with the small number of cases presenting excessive acidity, only 34.1 per cent, while 56.8 per cent. showed normal, 9 per cent. diminished acidity. Diminished contractility of the muscular wall of the stomach, often caused by anemia, plays an important part in the causation of gastric ulcer. He confesses that we are no better off today, than we were twenty years ago in our means of localizing the ulcer. Speaking of treatment Prof. Fleiner commended a hunger cure, for then the stomach is most contracted. Later a strict milk diet with rest for a month, then slight exercise and a little meat. For pain subnitrate of bismuth, 10 to 20 grammes suspended in half a pint of water. Seventy-five per cent. of cures are claimed by him. Surgical treatment, in common with other speakers, while not rejecting entirely, he would reserve for a last resort or such cases in which the ulcer is located at the pylorus, so that spontaneous cure cannot be looked for. Altogether this, the latest and best knowledge and medical treatment of a not very rare disease, is discouraging. Not much progress in it. We cannot help admitting that the position of the surgeon is stronger, for he has made advances. There is no guesswork as to location and numbers of ulcers, when the organ is laid bare for inspection. And gastro-enterostomy obtains excellent results in the cure of gastric ulcer and complete restoration of health.

MALADIES OF THE FEET.

Complaints regarding affections of the feet are often passed over too lightly. The editor of London Health has the following to say on this subject:

Corns are answerable for a good deal of suffering and annoyance, but they are not the only ills that the flesh (of the feet) is heir to. There are many maladies affecting the feet which are attributed to corns, but which are really caused by other troubles. It is often the case that a muscle is strained or a nerve is hurt. The foot is a very delicate and complex member, and needs very much better care and attention than it receives from a majority of persons. If there is anything that seems serious it is well to consult a surgeon. People have become helpless and unable to walk at all on account of neglect. Injuries which they slight at first may culminate in something of great account. If the feet swell and are so very painful and sore, there is more than a trifling cause for it.

ALKALOIDAL THERAPEUTICS

Original articles, reports and notes on dosimetry are desired for this Department.

ACONITINE.

Aconitine is a remedy frequently used by the practitioner experienced in alkalometrv. When understood and properly used it is a therapeutic agent of great efficiency.

Aconitine is the alkaloid of aconitum napellus. Commercially it appears in two forms, the crystalline and amorphous. The latter represents nearly the whole drug and is the form generally used. To get the desired effect from aconitine a reliable product must be used. The crystalline form is prepared in granules of $\frac{1}{500}$ grain and the amorphous in two sizss $\frac{1}{500}$ grain and $\frac{1}{134}$ grain; the latter size is the granule usually used. The granules of a reliable make, such as Abbott's, are always uniform in strength, always reliable, and are always safe if given dosimetrically, that is small doses repeated to effect. Dangerous results are never obtained if the remedy is stopped when the full physiological action is apparent by the peculiar tingling of the peripheral nerves.

Aconitine dilates the arterioles and capillaries thus slowing cardaic action and equalizing blood pressure. It diminishes the excitability of cerebral centers and the sensory tract of the cord. It promotes the action of the skin and kidneys.

In almost all febrile conditions aconitine can be used with advantage. In the ephemeral fevers of childhood and in the exanthemata it is especially valuable. In the early stages of inflammatory processes—pneumonia, pleurisy, peritonitis, erysipelas, pericarditis, rheumatism, meningitis—it is a very valuable remedy. It reduces the temperature, moistens the skin and very much modifies the severity of the symptoms.

The following is what several practical dosimetrists say of its action and uses:

Dr. John E. Harris says:

This alkaloid has never been excelled as a general antithermic in dosimetric quantities. What brilliant results are achieved in acute congestions of the mucous surface! The small, frequent pulse of fevers assumes a normal condition under its wonderful influence. The obstruction to the circulation is removed; the capillary system of blood vessels regains a healthier tone, while the heart is given greater power, and with these effects a sedative action follows the reduction of temperature.

Dr. P. H. Thornton says:

Used in all fevers and neuralgias, combined or single, as well as locally. It is also antispasmodic, narcotic, apyretic. One or two granules every fifteen minutes in acute cases. In adynamia give strychnia also. In neuralgia one granule every half hour until relieved.

Dr. C. H. Warren says:

A sedative, acting on the vasomotor system. Indicated in pyrexia, to reduce increased body heat; to the physiological mean, one granule every quarter or half hour, according to the severity; in congestive lesions of the respiratory and circulatory systems; in renal hyperemia, conjointly with digitalin; in congestive spasms; in irritative lesions of the skin; in neuralgia and rheumatic affections against pain and irritative congestion.

Some authorities state that aconitine is a dangerons remedy in typhoid fever. Others, however, who have carefully investigated, report good results if it is carefully used, with digitalin, for the first week or ten days.

DISCUSSIONS.

This Department contains each month case reports, letters, inquiries and replies from our readers. If you have a case you would like some help with, or a question to ask, write to us and we will publish it in this Department and you will get the opinions of our medical brethren. When you have an interesting case, write a report of it and send it in and it will help some one else. We need each other's counsel so let us help each other from our experiences. Letters are desired from physicians on any subject pertaining to our profession.

EXPERIENCE.

It is very sad to think that the time has arrived when a man who has been in an active practice of the medical profession for nearly a quarter of a century will have to step down and out, but from the outlook my time has nearly come. I see where a prominent minister of the gospel, after being treated by several prominent M. D.s (and I dare say without charge) has found the relief so much sought for, in a few bottles of peruna, at a cost of only one dollar yer bottle.

In the same sheet of Godly mission I see that all the suffering female needs is a bottle of Lydia E. Pinkham's vegetable compound to insure health and pleasure for the next half century. Also a fellow who owes me a bill is taking six bottles of Shoop's restorative which he got for only $5.50 with a guarantee that it would make a permanent cure of his case. The druggist had to take back three bottles if it failed and he has already said that he would get three bottles free.

The darkness before me is so different from the light that shone around me twenty-four years ago when I was riding a large sorrel horse with two white feet six to eight miles per hour over the mountains of North Georgia. When I had no patients and tired of reading (which was often as I thought I knew it all) I would plow for the landlord at $1.00 per day for myself and horse. But I remember one day I was called very hurriedly to see a child that was having fits. It was about five miles on the main road, but a path across the mountains was only about half that distance. I went in a hurry and reached the house some little time before the father of the babe. I was sitting beside the crib making an examination, and "waiting for indications" when the father dismounted at the gate. Just then the "indications" of another convulsion came on, and before I knew what was going on the young mother took the child from the cradle and ran out the door and around the house screaming at the top of her voice "my baby's dying." I could do nothing but to run after her and the husband ran after me, and so the case went on as long as the convulsion lasted, after which we went in and I made a solution of sodium bromide and potassium bromide and gave the child ten grains every hour. A half oz. castor oil was given 30 minutes after the first bromides and the child put in hot water as soon as we could get a fire. It had no more convulsions and I have never received any pay for that visit. I did a fairly good practice far a very young doctor and took corn fodder, wheat, oats, potatoes, cows, shot guns, pistols watches and fiddles, but little cash, and have long ago learned that a country doctor doesn't get rich from his practice.

I learned that year that calomel was the best intestinal antiseptic and used it until now giving one-tenth to one grain, and at intervals of one hour to several days.

F. G. Thomason, M. D.
Kissimmee, Fla.

Spiess regards the glottis spasm in pertussis due to the peripheral irritation of the superior laryngeal nerve. He highly recommends the insufflation of orthoform.

OBSERVATIONS.

THE REAL DISCOVERERS.

It is commonly thought that most of the new thought, invention, discovery, etc., comes from the minds of men who are distinguished teachers, professors, city dwellers, street corner prominences, book writers, etc. Such is so far from the fact that without being personal I wish to give my reasons for believing that most original thought comes to the knowledge of mankind through the mouth or pen of a street crier, a distinguished reporter or one who makes it his business to be a dealer or pawnbroker in other people's ideas. A reporter, a pawnbroker, a street corner politician, in short, a man of distinction who is seen often at the crossing of the two main thoroughfares, seems to the casual abserver to know it all and thought it all out ahead of everybody else.

There was a scientist pre-eminent before the world. It chanced that I knew an honest and retiring man, who had been the pupil of a very close associate of this distinguished scientist. One day this man made a remark that set me investigating. My investigations proved to me that this pre-eminent scientist was merely a good talker and a good writer, who had under him thinkers and workers who were not talkers and writers. Now the world thinks that scientist A. discovered a multitude of things but the fact is he discovered nothing. He merely reported other men's discoveries, taking all the credit to himself. Had one of his underlings had the audacity to claim anything for himself the world would have laughed.

Once I had an inventive friend, an old gentleman named B. Bringing up this subject the conversation turned on a world revolutionizing invention credited to C. B. remarked: "I used to know C. He had an active mouth and a fertile pen. He was a parrot. Inventor! Well, I should say not." I gave him some ideas. So did Professors D., E., F., etc. He went around among hard working obscure thinkers gathering up their ideas. We liked to talk with him. He was very affable. He took notes. He wormed himself into the confidence of everyone that might have an idea upon his pet line. Then he employed mechanics. He was not able himself to insert a rivet. A book was published and our C. "invented" something. The world picked C. and the book up and displayed C. as a great inventor. We fellows laughed, that is, D., E., F. and myself. He made me tired. When I read C.'s name now it nearly makes me sick. Inventor! Why, that man would have invented a mode of closing the eyes of the dead if some one had given him a copper and an idea.

Medical thinkers are like all others. As the world looks on they are in the rear rank of the profession. They do not pay big rent or strut through the wards of distinguished hospitals as the great "I am". The country doctor, quiet student and worker in the laboratory, and the inconspicuous city doctor, are usually more or less watched by the "leaders" of the profession, and said leader puts their ideas on record as his own. His very "nerve" in doing this makes him distinguished. Now, when I behold members of our profession worshiping at the shrine of a big mouth and a reportorial pen I like to put in my bazoo a bit, uttering a discordant note from amid the rattlesnake inhabited sage brush.

QUACKS AND DUPES.

I had just completed my college and hospital experience and settled down to practice in a coal camp in 1890. One of my first cases was a bright, healthy young man of 25 years. Care-

ful inspection disclosed a woebegone expression. He began by saying: "Doctor, I am the victim of an awful disease. I fear I am past cure." "What," said I, "have you got a cancer?" "No," said he, "worse than that." "Surely," said I, "you are not consumptive, and I know you have a sound heart." "Yes, said he, "I am all right there, but my disease is something worse yet." At that I made some sound expressive of incredulity, remarking that I did not believe much was the matter.

"Look here," said the young man, "I have studied a little medicine myself and I know that my case is almost hopeless, but, doctor, here is $200.00 that I will pay you now if you will undertake to cure me, and I am making $3.00 a day. I want to be cured and I will pay all I can to be cured. Money is no object to me. My disease is 'lost manhood'." "Ge!" said I, "the quacks have made a fine sucker out of you." Then he went on to tell me how he was engaged; how he "suffered a partial seminal loss when in the company of his girl." "Yes I have told her my trouble," says he; "how I am unsexed" but she says she wants me anyhow and I feel as though I shall be a villian if I palm myself off upon her. If I remembered correctly the next word I said was "Rats." Then I made that coal miner a little speech. "Young man," said I, "this world is full of thieves, pickpockets, and burglars are comparatively speaking, pretty good fellows, but a quack doctor is a human skunk. You have been reading the books that are published by so called doctors that put their pictures in newspapers and print bugaboo stuff to frighten such duffers as you into the idea that h——'s to pay with them. Now boss you're all right, except in your head. Your head has been turned by reading a fool-book. Killing would be too good for the skunk that wrote it. I don't want your $200.00 and you don't want a blooming bit of medicine. Go ahead and get married and that girl of yours will find you have more "manhood" than she wants. The discharge you speak of shows you're made of good stuff and are fully ripe and ready to marry. The best cow I ever saw always lost about a pint of milk before milking time and she was not sick by a jug full. You are all right; understand! If you do not find you have manhood enough for all reasonable requirements, instead of taking your $200.00, you are so anxious to get rid of, I'll make you a present of $200.00." When it comes to undoing the work of a dirty quack I have been known to get eloquent upon a few occasions and that was one. Mr. Man left my office promising that he would get married in a few days and test things. Six months from that time I called at his home and his pretty wife wore a Mother-Hubbard. Ignoring the possible embarassment I asked him point blank about his lost manhood. He did not wish a long conversation upon the subject.

In a newspaper today I saw the names and pictures of two congressmen praising the virtues of a nostrum. Will doctors vote for such men? If there is anything the quack tries to encourage it is that fool-notion that a layman should inspect himself with a view to finding some disease. When the layman has been long at that kind of foolishness if he gets some real disease he can make things so uncomfortable for his physician that he is apt to get sent away for his health or the doctor feels a sense of relief when he can avoid the case. I hope the day is not far distant when the quack will be regarded by law as he is, in fact, a criminal.

NEWSPAPERS AND DOCTORS.

When a new doctor locates in a little town the local newspaper editor usually solicits a card. If he does not

solicit it he expects it. Usually the newspapers of small western towns contain cards of all the local doctors, yet the writer never has been able to feel that these cards are strictly ethical.

If the doctor does not patronize the local paper to the extent at least of a card it is sure to be set down to a lack of public spirit or stinginess. The local editor will publish any number of good words for the doctor for a small consideration and they may appear side by side with laudations of Dr. Frog's Cough Cure and Mother Moon's Female Persuasive. If there is anything going on that may be a bit sensational it hurts the editor's feelings if Dr. Blank does not go out of his way to inform him. At an operation the local editor would like to be present with his note book, and that editor will manage to snub the M. D. and laud the competing quack and semi-quack unless he is treated like a superior person.

In short, any doctor can get all the newspaper laudation he will pay for. For $1.00 per month he can get a card and a few lines each week in the locals. For, say $3.00 per month, he will get many a compliment, and his name will be generously sprinkled throughout the local column. If he pays this editor two prices for doing his job printing, cards, envelopes, letter heads, etc., the newspaper will resound the doctor's virtues still more loudly. Possibly the editor will be nominating him for health officer, coroner or for the legislature if he contributes more liberally. It matters not what the real ability of said doctor may be, the newspaper will stand by him if he planks down the cash. The local paper is headquarters for gossip in every little town and if the editor is too much of a man to be a gossip and prattler of little things his paper will not pay, so it is but natural that the editor should easily fraternize with quacks and others of small calibre and little ways. The smallness of the town paper and its editor is felt instinctively by a physician who is broad and educated enough to be ethical. It is instinctively repugnant to such a doctor to see his card printed in the same column an Dr. Skinner's remedies for the indiscretions of youth.

The writer once asked a newspaper man who were the leading M. D.'s in a certain city. The editor mentioned the names of several quacks. The writer remarked: "They are not doctors but liars and thieves; surely you do not recommend them." He then learned that the editor was of the opinion that all the "smart" doctors advertised. That "advertising,' for an M. D. was "up to date." That non-advertising doctors got so little to do that they could not afford to advertise. Some years ago the writer in settling a bill for medical services with the parent of an editor threw off several dollars, remarking that the editor could set him down for subscription for a few years. When the doctor left for another location the paper was stopped. Writing to inquire the reason he was informed that nothing was due the doctor; that the sum of money mentioned went to pay for "puffs" in the local column. This editor, by the way, to this day does not understand that a self respecting physician would not bribe him to publish flattering locals concerning his practice. A vocation like his would tend to degrade the independence and manhood of one of high qualifications, but in such a vocation a "little" man is sure to become little better than a bribe taker, a blackmailer and a sycophant. When for a moment a physician occupies a level with such a man decency has fallen to the level of dirt and the medical profession suffers the ignominy.

C. E. Boynton, B. S., M. D.
Los Banos, Cal.

The Wisconsin Medical Recorder.

A Monthly Journal of Medicine and Surgery, devoted to the best interests of the whole profession.

J. P. THORNE, M. D., Editor and Publisher, Janesville, Wis.

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Original Articles are solicited from our readers We wish articles which are sent us to be contributed exclusively to this magazine. We will send the writer of any original article, if desired, twenty-five extra copies of the number containing the article. We are also willing to send copies to the professional friends of the author.

Letters, Case Reports and **Questions** are desired for our Discussions Department.

Society news and reports and items of interest are gladly received

Vol. 6. FEBRUARY, 1903. No. 2.

Have you ever read up any on suggestive therapeutics? There is something in it, doctor. When you have time look up the subject and you will not regret it.

This is the age of trusts and trades unions. Capitalists and laborers combine for mutual advantage. Why should not the doctors do the same? Co-operate for mutual benefit.

The Physicians' Casualty Company of Omaha is one practical application of co-operation among physicians. This is a company of physicians which is conducted, not for gain, but for the mutual advantage of physicians by furnishing accident insurance at actual cost.

Do you ever use massage? Its uses are many and benefits legion. Get a good work on massage, Graham's for instance. Read it up and practice it. What's the use of letting various "healers" get the good money when you can get it yourself and you can do better work.

The Physicians' Defense Company of Fort Wayne, Indiana, is doing some splendid work in protecting physicians from malpractice suits. The purpose of the company is to put up a strong defense and not to pay judgments. Every suit this company wins benefits the whole profession.

Be at the head of the profession, doctor. Have up-to-date methods and the coin will come your way. Love for the work is necessary and proper but it takes the coin of the realm to keep you going, doctor. It is all right to treat the worthy poor without charge but it is all wrong to treat those able to pay without the cash. Encourage cash business and short accounts; discourage long time accounts.

If your subscription to the Recorder has expired, send along your dollar for another year, doctor, and we will send you one thousand of our premium labels. When ordering labels or other printed matter always either send printed copy, as a card or old label, or else write name and address very distinctly. We often receive orders which are very illegible. A fancy, bank president style of signature is all right when writing to people who know you, but when a strange printer has to use this sort of copy it is a different proposition. Sometimes a name carelessly written looks clearly to be one thing when in reality it is something very different. Perhaps you say, write and find out the right name, but perhaps you have not stopped to think that we deal with

about 5,000 doctors and if we were obliged to write each one for particulars we should need a special office force to attend to the inquiries.

A few months ago we expressed our opinion of the advertising carried in religious papers. We are pleased now to record that the Methodist church has instituted a reform in the character of the advertising in its denominational papers. All medical and fraudulent advertisements will be refused by the Methodist papers. This is done as a matter of principle but will doubtless pay, as more advertising of a better character will be secured. If a paper publishes only reliable advertisements its space is more valuable to good advertisers. We do not belong to the Methodist church but the church with which we are connected cannot boast of the high class of advertising its denominational papers carry. A recent issue of one of these, a sixteen page paper, contains three pages of advertisements of nostrums and appliances for the cure of disease. The good people who read this paper as a message of truth are told about positive cures for consumption, cancer, etc. As these papers claim to be published for the good they can do the liberal amount of questionable advertising they contain is queer. Why not stop asking us to subscribe to support a good cause and come out and say these papers are published for the money there is in it?

The paper referred to contains also about two pages of advertisements of mining stocks. These may be all right but we have known of mining stocks which were not. We trust the publisher investigated and made sure the schemes were reliable before advertising them. We hope that soon all religious papers will take the stand the Methodists have and publish only clean and reliable advertisements.

THE DOCTORS' LIBRARY

This Department contains each month reviews of the latest and best books. Items of book news will keep readers informed on progress in the world of medical literaure.

THE DEVELOPMENT OF THE HUMAN BODY.—A Manual of Human Embryology. By O. Playfair McMurrich, A. M., Ph. D., Professor of Anatomy in the University of Michigan. Pages 527, with illustrations. Cloth, $3.00. P. Blakiston's Son & Co., Philadelphia.

The average physician knows little of embryology and finds but rare occasion in practical professional work, when such knowledge becomes really necessary. Embryology is one of those branches of science, a part of anatomy and physiology, which are requisite for the laying of a sound foundation. The author, a teacher of anatomy, became convinced of what most students are painfully aware of, that the study of descriptive anatomy, as usually carried on, is a difficult task, demanding the acquisition of an enormous mass of isolated facts. The work would be lightened and made more profitable if the facts could be combined into a harmonious whole, showing the relation of organs by their development. This is the purpose for which the book is written. The student of biology will find in it a complete exposition of the whole field of human embryology, often elucidated by recourse to comparative anatomy. The development of every tissue, organ and system is traced, a final chapter added on post-natal development, and the whole topic brought up to the latest scientific standard. While it is not possible to treat the subject in any other but a technical manner, it is done in the work in such plain language, as to make an otherwise difficult study comparatively easy.

The text is not encumbered unnecessarily by foot notes, but a list of references added at the end of each chapter. The numerous illustrations, many of them original, are clear and helpful. The publisher's part of the work is done creditably, the paper of good quality, the type large and clear, the illustrations sharp, binding neat and strong, the whole volume handy in shape and size. While the book will naturally be of greatest service to the student, it may be looked into by the older physician with profit and help him to recall to memory valuable knowledge.

How to Succeed in the Practice of Medicine.—By Joseph McDowell Mathews, M. D., LL. D., ex-President American Medical Association, Professor of Surgery, Hospital College, Author of "Mathews on Diseases of the Rectum," Etc. Pages 215, Cloth. Illustrated. Price, $2.00. John P. Morton & Co., Louisville, Kentucky.

This is one of the most fascinating books for doctors ever published. Dr. Mathews is always an interesting writer, but this volume is his most charming production. The author for twenty-five years has been teaching in medical colleges and this book is the result of talks which he has frequently given students on the business side of the medical profession. The book is written as a "guide to success for young practitioners," but the majority of the older practitioners can read it with profit. Many physicians die without estates and leave their families in want. If the advice given in this book is followed there will be no such unnecessary conditions. The chapter entitled the "Business Side of It" is well worthy of being read by every practitioner.

The book deals without fear or favor" with "fads and frauds." Character, so necessary in any calling, is fully dealt on, together with the other attributes which should make up the successful physician. The "frills and follies" of society come in for their full share of the author's opinion. The book will be a source of comfort and practical help to all young practitioners and a delightfully entertaining and useful book to the older practitioners. The "lights and shadows of a doctor's life" receive attention and the book is enlivened by the jocular vein running through it. Six full page photo-engravings illustrate the volume.

Eye, Ear, Nose and Throat.—Edited by Casey A. Wood, C. M., M. D., Albert H. Andrews, M. D., T. Melville Hardie, A. M., M. D. Volume III, Second Series of the Practical Medicine Series of Year Books, under the General Editorial Charge of Gustavus P. Head, M. D. Pages 321. Illustrated. Cloth, $1.50. The Year Book Publishers, 40 Dearborn St,. Chicago.

This book gives a review of a year's progress in these special departments. The section on the eye is edited by Dr. Casey A. Wood. He gives special attenton to the latest and best methods of treating muscle anomalies. Attention is called to various new methods and new remedial agents used in ophthalmic practice.

Dr. A. H. Andrews furnishes brief and concise abstracts of the leading articles of year on the ear.

Dr. T. M. Hardie edits the section on rhinology and otology. He calls special attention to the latest developments in the treatment of diseases of the accessory sinuses. A number of new things of the past year are briefly presented, as paraffin injections in nasal deformities, Freer's septal operation.

This set of ten year books is fur-

nished for $7.50. The mechanical makeup of the books this year is commendable.

BOOK NOTES.

Treat's International Medical Annual will soon be ready for delivery. No matter how many year books or other books you have, you need Treat's Annual.

Battle & Co., of St. Louis are continuing the publication of their colored charts on fractures. If you have not received the complete set of these really valuable colored plates you can get them free of charge of Battle & Co.

Suggestion is a magazine devoted to scientific and practical psychology. It is edited by Dr. H. A. Parkyn, who makes the magazine of special interest to physicians. Sample copies sent on application to the publisher at 4074 Drexel Boulevard, Chicago.

The January issue of Archives of Pediatrics is the first of the twentieth yearly volume of a journal which is the oldest in the English language devoted exclusively to the diseases of infants and children. During the coming months it will contain contributions from the leading pediatrists of the world. It is published by E. B. Treat & Co., New York.

Everybody's Magazine begins most appropriately with an article on India, "The Courts of the Rajahs." This is apropos of the great "durbar" at Delhi. Both text and illustrations are graphic exponents of the India of the past and the India of today. Alfred Henry contributes the third article in the series, "Great Days in Great Men's Lives." An account of Miss Jane Addams of Hull House and what she has done for the poor of Chicago is very interesting. Booker T. Washington continues "Work With the Hands," with the fourth paper of his autobiographical example. Oscar King Davis writes "Incidents of Service in the Philippines and China." "The New Medical Science of Prevention," by Doctor Thomas L. Stedman, is a timely exposition of the real value of physical culture.

The prominent feature in Lippincott's Magazine is always a complete novel. That contained in the February number is by Alice Duer Miller, entitled, "A Man of his Word." Mrs. Miller, by the way, belongs to a popular New York story writing family. Both her mother and sister are well liked contributors to the leading magazines. The motive in "A Man of His Word" is the moral obligation of a member of the Four Hundred to marry a young school teacher because her mother had saved his life at the expense of her own. Before her death she whispers to her debtor: "Marry my daughter." On this foundation the author has built a tale of compelling interest and infinite diversion. In addition to the novel, eight striking short stories enliven the pages. There are four papers varied in theme: "An Unwritten chapter of 'Les Miserables,'" by Victor Hugo's brother-in-law, Paul Chenay; "Wave Motors," by John E. Bennett; "A West African Trading Station in the Niger Delta," by J. W. Davies, and "Chronicling Small Beer," by Dr. Charles C. Abbott. The "Walnuts and Wine" department is as full as always of original fun that is really laughable.

The table of contents of the February McClure's is a long and brilliant one. Will H. Low has a magnificently illustrated first paper on "A Century of Painting in America, dealing with "The Fathers of American Art". Robert E. Peary tells of his own "Last Years of Arctic Work."

Under the general title, "The Surgery of Light," four writers have something very timely to say about one of the most important discoveries of medical science in the last decade for the treatment of lupus and kindred diseases. The first of the four, Jacob A. Riis, his countryman, has a brief sketch of the discoverer, Dr. Neils Finsen, of Copenhagen, himself an incurable invalid. Cleveland Moffett writes of the treatment itself and its wonderful efficacy. Alfred Harmsworth, editor of the London Daily Mail, gives an account of the adoption of the cure in England; and Dr. George C. Hopkins of what has been done in America. Francis C. Nichols has a striking article entitled "Children of fhe Coal Shadow," full of interesting information about the child labor unions of the anthracite regions. The fourth chapter of Miss Tarbell's history of Standard Oil is called "An Unholy Alliance".

The Household for February is an issue for patriots and true lovers. Nearly all the articles and stories which it contains have some relation to the three great days which come in the month of February. The cover page is an admirable representation of one of best pictures ever made of Abraham Lincoln, and the leading article is the story, by Grace B. Faxon, of "Washington's First Wooing," with a portrait of the lady, and a picture of the old manor house near New York which was her birthplace and home. Henry E. Jackson, well known as a critic and lecturer upon art matters, writes "The Madonna in Art, a Study in Motherhood"; and there is an article on "Girl Life at the Carlisle Indian School", which gives an excellent idea of the work and the pleasures of the Indian girls in this admirable institution. Among the decorative features of the number are a poem by Eugene C. Dolson, "In Gloucester Bay," with decorations by F. D. Bowers, and one by Frank Walcott Hunt entitled, "The Two Granaries," with pen drawings by Eliot Keene. The various departments of the magazine are full of timely suggestions, and the artistic nature of the number is such as will delight the magazine readers of the country.

The Medical Book News, in the four numbers thus far issued, has provided an interesting illustration of the really very small figure for which all the new books on medicine and allied sciences published in 1902 might be purchased, were anyone desirous of so doing.

In July (initial) number, 79 American and English titles appeared under the heading, "Recent Publications." These titles represent 31,232 reading pages and 5,473 illustrations. The net price for this wealth of medical literature is only $287.15.

The September number listed 84 titles, these standing for 33,209 pages of printed text and 9,731 illustrations. The net purchase price for these 84 works is $239.41.

An increase in titles is noted in the November number, which announced 105 new publications. A total of 41-229 reading pages carrying 7,202 illustrations is here offered for $305.20.

The January issue runs rather heavy in point of number of recent publications listed, 95 being found. These listed volumes contribute 41,183 pages of reading matter and 6,436 illustrations, at a net purchase price of $313.95.

A grand totaling, therefore, shows that the 363 new works published within the last twelve months, representing 146,853 pages of reading with 28,842 illustrations, could be purchased for the comparatively small sum of $1,145.71, this being an average of but $3.15 per volume.

THE DOCTORS' WORLD.

Therapeutic Briefs, Medical News Items, and Clinical Notes on Medicine and Surgery.

Hyaline Casts.—While the presence of hyaline casts in the urine is not always pathognomonic of disease, yet their presence always suggests further investigation. The following from the Vale Medical Journal nicely summarizes the indications of the hyaline casts:

Purely hyaline casts have been found in a large per centage of individuals who are apparently healthy and without other evidence of kidney disorder. These per centages increase with the advance of age. This, in the absence of post mortem observations, has led to a more or less general belief that hyaline casts in urine of individuals past fifty are without significance.

A series of forty-eight autopsies in which urine examinations had been made some time previous to death, shows that casts were present in forty-one cases and chronic nephritis in forty-seven cases, permitting the inference that hyaline casts were distinctly an indication of organic disease of the kidneys.

The five disease conditions in which hyaline casts exist alone or with finely granular casts are: The atrophic stage of chronic parenchymatous nephritis, chronic interstitial nephritis, chronic diffuse nephritis, senile interstitial nephritis and chronic passive congestion of the kidneys

The prognosis of these conditions, with the exception of passive congestion, depends as much upon the general clinical condition of the patient, especially in reference to cardiac and vascular disease, as upon the character of the kidney lesion.

* * *

The Plague.—The presence of plague in San Francisco and Mexico and the possibility of its spreading to other parts of the country, make its consideration at this time of practical importance. A thorough knowledge of the means by which the disease spreads is of great value. Dr. W. J. Calvert has contributed to the St. Louis Medical Review an excellent article on the transmissibility of the plague, from which we take the following extracts:

The discovery of the bacillus pestis by Kitasato and Yersin, in 1894, opened to us a new field which in time must disclose the long hidden secrets of this disease.

While in Manila I performed a series of experiments to determine the viability of bacillus pestis. Sterile slips of writing paper were inoculated by immersion in a forty-eight-hour culture suspended in a salt solution. The slips were then placed in sterile test tubes in a thermostat at 32 degress to 34 degrees C. For each examination five slips were used. They were transferred from the sterile tubes to bouillon for forty-eight hours. From the bouillon plates were made from which pure cultures were obtained. When the experiment was undertaken it was my intention to inoculate monkeys and rats with each recovered culture, but, unfortunately, when the cultures were obtained animals could not be bought. At the end of twelve days five slips were positive; seventeen days, three; twenty-eight days, four; thirty-four days, two; thirty-nine days, none; and forty-four days, one. One animal was inoculated with a culture recovered after seventeen days in a thermostat. A typical fatal case of plague resulted. At autopsy the organism was recovered.

Kitasato found that the organism was killed after four hours' exposure to direct sunlight, and the German commission after two hours. I prepared slips of paper as above described, and exposed them on a brick pavement to direct sunlight. At intervals of fifteen minutes two slips were examined as above described. All of the slips examined were positive up to and including two hours and forty-five minutes; after this the bacilli were dead. An animal inoculated with culture, recovered after two hours and forty-five minutes, developed a fatal attack of plague.

To disinfectants the organisms seem most susceptible; weak solutions of the several poisons kill the bacilli in a remarkably short time.

On media cultures maintain their virulence for many months. Full virulence has been noted after fifteen months. Frequently I have found four-months-old cultures as virulent as when young. Even in a dried state its virulence is long maintained. I obtained a most virulent culture from paper slips after seventeen days in thermostat, and in dried organs cultures have remained virulent after forty-eight days.

The life and maintenance of virulency under unfavorable conditions are most important, and may explain the origin of successive epidemics, especially when a previous epidemic is long continued by occasional cases. If the organism can live forty-four days on dry paper and forty-eight days in dry organs, how much longer may it live in more favorable media to be found in all the oriental cities? These facts suffice to explain the transmission of plague to foreign ports.

Lymphatic glands harbor the first organisms entering the body. There they multiply and later gain access to all parts of the system. The blood may be infected from the second day of disease until death. In one case, I found bacilli in the blood for a period of forty-eight days. After septicemia develops, bacilli may be found in the saliva, urine, feces, etc. Owing to multiple hemorrhages in the mucous membrane of the stomach, vomits may be ladened with bacilli. Through these means, clothing, furniture, etc., in the sick room may become infected, and the infection carried to neighboring localities. Convalescents, in whom septicemia continues for many days, are especially dangerous as the individual may go to neighboring districts or even to foreign lands.

History shows the susceptibility of domestic animals. As early as first Samuel, chapters 5 and 6, plague among the Philistines and the pollution of the fields by dead mice are mentioned. The Philistines made gold images of mice to appease the gods. Many observers mention the high mortality and migration of rats and mice. Swine, cattle and horses are susceptible, as are many wild animals.

Recent observations have given to insects an important role in the transmission of diseases. In "De Regimen Pestilentico", published in 1498, the first mention of the role of flies in plague in made. Since this time numerous observers have mentioned the importance of insects in spreading plague, but few have given definite information.

Raw material and fabrics may be infected by sputum, etc. In Kobe, Kitasato found bacilli in goods from Bombay. Employes working with this material contracted the disease.

These observations suggest a brief mention of the endemic home of plague. Egypt seems to have been the earliest center from which plague spread along the shores of the Mediterranean to Asia and Europe. At present China and India seem to furnish an additional endemic home.

All nationalities are susceptible to plague. The apparent racial unity is

due to some artificial protection arising from national characteristics. Of these, dress which best protects the individual, personal and domestic cleanliness are most important.

Owing to many almost unsurmountable difficulties, definite information regarding portals of entry for plague is not at hand. Experimentation on animals has shown that an introduction of bacilli into the tissues is sufficient to produce the disease. The number of bacilli so introduced seems to be of minor importance. This fact indicates that a few bacilli lodged in a small, even microscopic, wound may produce a plague. The location of primary buboes is of considerable importance in this connection. In adults 69 per cent. of primary buboes are femoral and inguinal; 22 per cent. axillary, and 9 per cent. cervical. The large per centage of inguinal and femoral buboes, especially among unshod races, would indicate the infection of small sores on the most exposed regions, namely the legs and feet; while from less exposed parts we find a smaller percentage of primary buboes. Additional evidence of this source of infection may be found in the location of primary buboes in children. Here we find inguinal and femoral buboes in 19 per cent. of all cases- axillary 32 per cent., and cervical 49 per cent. It is well known that whenever possible a child will put anything into its mouth, and is inclined to play on the floor or ground, and the hands are more liable to infection than are the feet. From abrasions in the mouth, infection is carried to the cervical glands. In some cases infection may occur through the lungs, especially pneumonic cases.

Much discussion has failed to decide the possibility of contracting plague through the digestive tract. My observations warrant the conclusioh that in rare instances plague may be contracted through the alimentary tract, but in feeding experiments infection most frequently occurs through small abrasion in the buccal mucous membrane.

Infection through the genital organs, although rare, has been noted. This evidence is circumstantial, but strong.

Direct transmission plays a minor role in the spreading of plague. Excretions, hemorrhages from the nose and lungs, vomits, fluid from pustules and carbuncles, pus from buboes and old plague sores, sputum from plague pneumonia, edema of lungs and ulcerated tonsils, contain bacilli in varying numbers and may serve as media of direct transmission. As patients die during the height of disease, plague cadavers are infected and a source of danger. Bites of infected animals are worthy of note. The relatively small number of cases of plague occurring among attendants in plague hospitals and workers on plague, demonstrates the minor role of direct transmission.

The indirect transmission, the viability and virulence of the organism are of prime importance. Infected materials, food stuffs, convalescent patients, etc., have already been mentioned. Air and water rarely, if ever, carry infection. In infected cities certain houses become, so to speak, endemic plague centers in which case after case develops in spite of thorough disinfection.

In conclusion, it may be said that the bacillus pestis is long lived; is carried by raw material, flies, etc.; gains access to the system through superficial abrasions and the pulmonary tract, and that a relatively small number of organisms may cause the disease.

* * *

It is said apocynum cannabin. 7 gtt. t. i. d. has cured Bright's disease.—Dr. C. E. Boynton, Los Banos, Cal.

MODERN THERAPEUTICS

Brief original communications and short abstracts giving the latest in therapeutics.

NEW REMEDIES.

By S. E. Fowler, M. D., M. E., Ph. D., Kansas City, Mo.

It has been remarked by more than one writer that there seems to be a tendency on the part of the progressive members of the medical profession to indulge in an interchange of ideas in regard to new pharmaceutical products that may be offered to the profession from time to time. This is as it should be I think, for it is by such interchange of ideas and experience that we arrive at our conclusions as to the merits or demerits of any particular preparation. 'Tis true as has been stated before this one man cannot test all the new preparations, but while one man is testing one preparation others are testing other preparations and if the experience of all was brought together and and made available it would result in much good to the profession at large.

I know of no better way to get such matter before the reading, thinking members of the profession than through the medium of the medical press and would suggest to practitioners that when they have thoroughly tested a new remedy or pharmaceutical product and haxe found it efficacious to indict an article on same to some good medical publication, giving their experience with same, thus giving the profession in general the benefit of their observation aud experiments.

Following the line that I am advocating I wish to call attention of the profession to a preparation with which I have been having excellent success. It is a fact admitted by the majority of the profession that where a nutritive reconstructive is indicated, more especially in patients of a tuberculous diathesis, the remedy par-excellence is some preparation of cod liver oil very often preferably in combination with the hypophosphites of lime and and soda.

The majority of the preparations of cod liver oil are so unpleasant to take that they are not tolerated by weak stomachs. But there is one preparation of cod liver oil I am pleased to say, that I have used very extensively in my practice that is not open to this serious objection as it is a pleasant preparation to take and produces no nausea even with the most delicate patients. I refer to cord. ol. morrhuae comp. (Hagee). I have been using it in my practice for some considerable time and always with good results. A few cases of which I will make mention.

Mrs. O. H., 33 years old; mother of 4 children. Her mother had died of consumption (presumably). Had been in poor health since birth of last child, two years previous to calling upon me. Very anaemic and considerable cough. Had been told by her family physician that she had consumption. Upon examination I found no serious lesion of lungs. I prescribed cord. ol. morrhuae (Hagee) in maximum dosage with vapor bath and oil rub twice weekly. A very noticeable improvement at the end of first week. I ordered a continuance of the same treatment and at the end of three months patient reported that she had gained 23 pounds in weight. Cough entirely gone, and general health as good as it had ever been.

Case 2.—Mr. J. R. T., 42 years old. Anaemic, profuse night sweats, appetite poor, bowels very irregular, severe pains at times in left lung, but very little cough. Prescribed cord. ol. morr-

huae (Hagee) which treatment was kept up for two months with the result that he entirely regained his usual health.

Case 3.—Mattie C., 12 years old; poor recovery from an attack of la-grippe, occuring about a year previous to calling on me. Considerable cough and pains in chest. Prescribed cord. ol. morrhuae (Hagee) which treatment was kept up for three months when patient was discharged entirely well.

STRAIGHT TALK FROM ALKALOIDAL HEADQUARTERS.

THE RAPID-FIRE GUN OF MODERN THERAPEUTICS.

The same spirit of conservatism that opposed the introduction of modern weapons in warfare, of rifled guns, breechloaders and smokeless cannon; and of modern methods of shipbuilding, the introduction of steam, the propeller, the compound engine, iron armor, etc., is still to be found combating the replacement of old fashioned drugs by the alkaloids, in ready-to-use granule and tablet forms. Nevertheless the latter will prevail, because they are best, as shown by the following characteristics:

1. Their uniformity of strength.
2. Their uniformity of effect.
3. Their certainty of effect.
4. Their quick solubility and absorption, and consequent speedy effect.
5. Their portability, and the consequent reduction of the weight and bulk to be carried on the person—a vest pocket case carries the essentials for emergency practice.
6. Their ease of administration and the absence of unpleasant and irritating effects.
7. The necessity of weights, scales, measures and other pharmacal paraphernalia is obviated by the manufacturing pharmacist.
8. The perfection with which their action has been worked out allows really specific application.
9. They do not deteriora'e with age or in any climate, are easy to use, pleasant, safe and sure.
10. They give effects impossible to obtain from the old preparations.
11. Anyone of ordinary intelligence can be taught how to give them and when to stop. Trained nurses while always desirable are not always essential.

Every one of these statements can be verified by argument or by demonstration. The only question remaining is, whether one is to be ranked on the side of mossy conservatism or of intelligent progress.

Samples, literature and prices current sent on application to the Abbott Alkaloidal Co., Ravenswood Station, Chicago. Branches: New York and San Francisco.

THE TREATMENT OF INFLUENZA AND COUGHS.

We excerpt the following from the Toledo Medical Compend by David E. Bowman, M. D., Toledo, Ohio, Professor of Obstetrics, etc., Toledo Medical College. "The elimination of the toxins is too frequently overlooked in these cases. Formerly, in there efforts to relieve the distressing symptoms, the profession have used remedies which produced stomachic disturbance, arrest of secretions, constipation, etc. I find nothing better to overcome the congested condition, in these cases, than two laxative antikamnia and quinine tablets given every 3 hours. If needed, follow with a seidlitz powder or other saline draught the next morning, before breakfast. This will hasten peristaltic action and assist in removing, at once, the accumulated fecal

mater. Heroin hydrochloride has been so largely used for coughs and respiratory affections that it needs little or no recommendation in this class of cases, but the favorable synergetic action of this drug used with antikamnia, is, I believe, not sufficiently appreciated. Antikamnia and heroin tablets will be found useful by every practitioner, particularly during the winter and spring months. The antikamnia not only adds potency to the respiratory stimulant and expectorant qualities of the heroin, but it prevents the slight nausea which may at times follow its administration alone."

COMMON SENSE TONIC MEDICATION, WITH ILLUSTRATIVE CASES.

By A. W. Duvall, M. D., Philadelphia, Pa.

Every physician of experience has many times felt the need of a satisfactory method of treatment for the exceedingly common class of cases attended with impoverishment of blood, exhaustion of nervous force and the constitutional condition designated malnutrition. Any or all of these conditions may exist independently, may co-exist, or may be part of organic diseases of the respiratory, nervous or digestive systems. It can be safely stated that the ordinarily employed tonics and reconstructives, iron, arsenic, strychnine, cod liver oil, etc, fail in the majority of cases to effect the desired results. It is soon apparent that these remedies are not absorbed, or if they do enter the system, fail to bring about the desired change in the blood, the nervous system and general nutrition. Reasoning a priori it seems that the most rational and scientific method of treating these is by fostering the patient's nutritive functions; and this can only be accomplished by directing treatment first to restoring the enfeebled digestive organs, so that food, the natural reconstructive and tissue builder, will be digested and assimilated. This may be said to be the first and most striking indication for treatment, inasmuch as there are always present the symptoms of atonic dyspepsia with loss of appetite, and an absolute inability on the part of the patient to take sufficient nourishment to replace the increased waste of tissue brought about by the disease process. Most so called tonic nutrients and reconstructives have little or no influence upon these most important functions. Iron is administered in anaemia because that element is known to be deficient in the blood: the fact that the deficiency of iron and impoverishment of the blood is but a part of a clinical condition, of which general tissue impoverishment —malnutrition—is the essential and underlying feature, seems to be disregarded. Cod liver oil, according to both scientific investigations and practical experience, is of utility only as a food fat; aside from this its therapeutic, i. e., remedial value is prctically nil. Strychnine is a stimulant to the nervous system, and, according to Professor Hobart A. Hare and numerous other authorities is positively contraindicated in most conditions which are regarded as requiring tonic medication. What is most needed is an "all around" tonic, which attacks the pathologic conditions upon the rational scientific basis of restoring tone to the general system, blood, nerves, organs, nutrition, by an imitation of nature's methods of restoring waste of tissue and impoverishment of nervous force, i. e., by coaxing the abrogated digestive and assimilative functions—and thereby the general nutrition—to resume normal physiologic activity. This is all the more imperative when one considers that the various pathologic conditions associated with organic

diseases and impoverishment of blood and vitality, have the one essential feature in common, i. e., malnutrition. The correctness of this reasoning is amply proven by an extensive experience in treating a large number of cases of exactly the kind which every physician regards as requiring tonic treatment. The following cases are selected at random from a large number of similar ones, and are cited merely to illustrate the foregoing remarks upon what constitutes both rational and scientific tonic medication. The remedy selected was a mixture of gentian, taraxacum, dilute phosphoric acid, glycerine, with a small amount of sherry wine and carminatives (furnished under the name of Gray's glycerine tonic compound), all of which ingredients have a well known and universally acknowled tonic influence upon the digestive and assimilative functions. Particular attention is directed to the diverse character of the cases, the diagnosis in each of which was perfectly clear.

Case 1.—Female, seventeen years of age; mill operator; had gradually lost flesh and strength for a period extending over about seven months. At the time of beginning treatment she presented the picture of typical chlorosis. Her skin was a waxy green, her conjunctivae of sky blue color, and she was emaciated to a marked degree. Menses had not been present for four months. The haemoglobinometer on three separate examinations during a period of ten days showed remarkable corpuscular impoverishment—an average of 42 per cent. The subjective symptoms of muscular weakness, with mental lethargy, were most pronounced. She had been unable to take food, except of liquid character, and in very small quantities, for several weeks. Appetite was totally absent, and milk and broths, even in moderate amonnts, occasioned gastric distress and were frequently vomited. She had at times paroxysms of pain resembling gastralgia. Constipation was a marked feature. Physical examination of the thorax revealed loud, systolic, blowing murmurs—haemic—over the entire precordia, most pronounced at the base of the heart and in the carotids. There was prescribed in addition to rest, frequent bathing, peptonized milk and Blaud's mass in ascending doses. Two weeks' treatment by these measures failed either to increase the proportion of haemoglobin or relieve the general weakness and marked disturbances of the gastric functions. She was then placed on Gray's glycerine tonic compound, two drachms four times four times daily, and the iron was discontinued. At the expiration of seven days she had desire for food, which was apparently digested and assimilated. She was given fluid extract of cascara sagrada in fifteen drop doses at bedtime to overcome constipation. Her appetite gradually returned; she was able after two weeks to take lighter articles of diet—eggs, toast, scraped raw meat—and she had consequently gained strength. Treatment by rest, bathing and the administration of Gray's glycerine tonic compound was continued for eight weeks, at which time she had gained fourteen pounds in weight, was entirely free from gastralgia and the symptoms of atonic dyspepsia, and her haemoglobin had increased to 82 per cent. She has had slight menstrual show, and she is now so far convalesced that she is able to indulge in a fair amount of physical exertion without experiencing undue fatigue.

Cases 2, 3 were patients of the clinical character usually designated general debility in which, in addition to disorders of metabolism—manifested by loss of energy and body weight—there were particular enfeeblement of the digestive functions amounting to well marked cases of

atonio dyspepsia. Two of these cases had been under various tonic treatments for periods varying from two to four months. In accordance with Allbutt's dictum, concerning cases of neurasthenia and pseudo-neurasthenia, that the "stomach is the link in the vicious circle which has to be forged anew" ("System of Medicine," Vol. II.), these patients were placed on Gray's glycerine tonic compound, the announced ingredients of which are well known stomachics and restoratives of gastric functions.

(to be continued.)

THE MENOPAUSE.

During the change of life the majority of women experience more or less discomfort. Nervous and mental disturbances are particularly apt to manifest themselves. such as changes in temperament, hysterical disorders, pains in various regions of the body and disturbances of digestion. All these disturbances have their foundation in a condition of passive congestion accompanying the gradual cessation of the menses. It is for this reason that Hayden's viburnum compound, on account of its nervine, anti-spasmodic and anticongestive action becomes so useful at this trying period of a woman's life. Moreover, in those cases in which there are profuse losses of blood not due to the presence of organic disease or malignant growths this product is an indispensable remedial agent.

The business of buying and selling physicians' property and practices has been carried on under the present management of the Medical Echo for 22 years. More medical practices have been sold through the medium of the Medical Echo than all other medical agencies combined.

BRIEF MENTION.

Phenolphthalein is a purgative derived from coal-tar.

Kryogenin is the newest coal tar antipyretic. Dose 5 to 15 grains.

Have you tried chloropepsoid? Better get a sample today; you will never regret it.

Dr. J. Zahorsky says that colds are due to pathogenic microorganism and are contagious.

Dr. Joseph Eastman has used urotropin successfully in fifteen cases of pnerperal septicenica.

If you want sharp instruments you need the dry hone made by E. A. Harrington, Waukesha, Wis. It is all right.

Bufotaline is a substance obtained from the venom of toads which is said to have an action identical with digitalin.

Phenadul is a valuable synthetic product. Send to the Andrew Chemical Co., Boston, for a supply and give it a trial.

Paper money frequently spreads contagion. It is a much more important etiological factor than generally considered.

When the roads are rough you need a good road cart. The cart made by D. F. Sargent & Son, of Geneseo, Ill., is a good one.

In atrophic conditions arsenauro is a valuable remedy. If you give it a thorough trial you will be convinced that it is a builder.

Some patients cannot take sodium salicylate on account of gastric disturbance it causes. Aspirin gives all the desirable salicylate action without the objections.

Red light has been successfully used by Krukenberg in the treatment of erysipelas. The absence of the chemical rays in the red light explains its beneficial action in erysipelas.

A scientific treatise on blood therapy, containing reports of hundreds of cases which have been successfully treated with bovinine—cases in which new, healthy blood and tissue building were required, will be sent free by the Bovinine Co., 75 West Houston street, New York. This book is worth sending for.

Dr. J. M. Lynch of the French Hospital, New York says: The triacol or elixir guaiacol compound, Alpers, has been used in our hospital with good results, and my experience in hospital and private practice has shown it to be a reliable remedy in all troubles of the bronchial tubes, and especially in the first stages of tuberculosis.

Hydrogen peroxide is a most useful remedy in carbonic acid poisoning from inhalation of coal gas, says Merck's Archives. The hydrogen peroxide is administered by the mouth and per rectum. By the mouth it is given in doses of 1 ounce diluted with an equal volume of water. Per rectum it is given full strength in 5 ounce doses.

Celerina restores the tired and jaded nervous system to its normal condition, and brings about a feeling of buoyancy that will be pleasing to both physician and patient. A fair trial will confirm the verdict of the medical profession all over the world as to the virtues of this preparation. It is put up in palatable form, and is always uniform in strength.

For an old gentleman, seventy-five years of age, who was suffering from hypertrophied prostate with difficult micturition, I prescribed sanmetto. The results were favorable, and after taking two bottles of sanmetto he was so much improved as not to require the use of the catheter, which he had been compelled to use for several months previous at least once in twenty four hours. I have since prescribed sanmetto in five similar cases with equally good results.—E. C. Culbertson, M. D., Keith, Ohio.

The ambulatory pneumatic splint is rapidly coming to the front as a standard all around appliance for the accurate setting aud treatment of fractures of the leg, thigh and hip joint, also of a Potts and patella fracture. Through the open dressing this splint affords access for the frequent examination, bathing, dressing, ventilation and massage of a limb, and through the superior care possible to give, surgeons using this up-to-date splint secure bone-union without shortening or deformity, in much less time than by other methods. Besides the use of this splint is more remunerative in larger fees or reputation and in comfort and certainty of a good limb for the patient in all cases where it is used.

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LEADING ORIGINAL ARTICLES.

TUBERCULAR ABSCESSES AND THEIR TREATMENT.

By Charles C. Miller, M. D., 100 State Street, Chicago.

Tubercular abscesses seen in the neighborhood of the rectum pursue a varied course, and the phenomena noted in different lesions vary widely. This is owing to the fact that the process may commence in different tissues in the region of the rectum, and in several different ways.

In some cases the process commences as an accumulation of the products of the bacillus, due to the action of the germs, which have been deposited in the tissues, where without other factors they have found a suitable soil for proliferation. Such an abscess or abscesses will cause but very little discomfort. The inflammatory reaction will be the slightest, and rupture into the bowel or externally may occur before the patient consults a physician.

In other cases our abscess will be the result of injury to tissues, the tubercle bacillus finding in such damaged tissues a soil suitable for proliferation. In other cases, the process may be the result of an extension of an ulceration either within the bowel or upon the skin surface.

Tissues, devitalized by trauma or other cause, may suffer pyogenic infection, and the condition go on to abscess formation, and subsequently fistula formation. At any time during such a process the tubercle bacillus may find in such structures a suitable soil for multiplication, if brought there, and deposited in any way.

Thus we can see that the mode of onset cannot form a valuable means of diagnosis especially when we consider that a non-tubercular abscess or fistula may pursue a painless, progressive, almost non-inflammatory course. This latter course is especially likely to be noted in those patients suffering from constitutional conditions, which have markedly depressed their vital resistance.

As symptoms of a tubercular abscess, we might enumerate somewhat as follows, according to most writers: First a chronic, painless course without the usual inflammatory reaction. The tissues pale and flaccid are infiltrated and soggy but not inflamed. The patient often has a tubercular lesion of some other part, and the discharge is said to pale serous or sanguinolent rather than purulent.

While it is true that in the majority

of cases the patient suffering from a tubercular abscess or fistula has a condition presenting symptoms coinciding with the above, in the very cases which we are likely to most suspect a tubercular condition, we may have the same symptoms in a non-tubercular affection. In other words, if a patient is suffering from tuberculosis of some other part, and is markedly depressed by the disease, we are most likely to suspect a lesion in the neighborhood of the rectum to be of this nature, yet if he is markedly depressed by tuberculosis the reparative effort of his tissues will be slight and a condition due to other causes will have the same indolent tendencies, as the tubercular lesion.

The discharge, upon which many attach so much importance, as a means of diagnosis, is very likely to vary widely, as to its nature owing to the fact that it is at frequent intervals being altered from incidental infection with other than the tubercle bacillus. In this way it may be typical at one time, and very shortly afterwards entirely atypical.

An examination of the discharge for the tubercle bacillus may be made with a hope of clearing up the diagnosis, but in not a small percent. no tubercle bacilli will be found, even when the condition is due to the germ. In recourse to the microscope, sections of affected tissues are more likely to give conclusive evidence as to the nature of the disease by the finding of the bacillus.

These few words, preceding the present statement, can but illustrate the difficulties, which beset the physician or surgeon in making a clinical diagnosis. Inasmuch as the treatment will be the same, whether tubercular or non-tubercular, we will proceed to the consideration of this subject.

Unless the patient is in a condition so depressed that a fatal result is likely to follow a radical operation, this is the course indicated. In those cases, where the general health is so depressed, as to prevent justifiable radical intervention, active local treatment should be instituted, combined with the internal administration of reconstructive tonics and other agents used in the constitutional treatment of tuberculosis.

Small indolent nodules, which appear about to rupture, are to be treated by freely opening and curetting out their contents. The opening should be made with a sharp bistory after the parts have been cocainized or frozen. In cocainizing the parts weak solutions in considerable quantity are the best. The tissues to be divided are throughly distended with the solution. Freezing may be accomplished by any of the rapidly evaporating sprays. This latter method is not as satisfactory as cocainization.

All diseased structures, which have softened, having been curetted out and hemostasis secured, the parts may be treated in several ways according to the choice of the operator. Simple compression with a pledget of cotton is often sufficient for the checking of the hemorrhage. If hot water is at hand the parts should be compressed for a few moments with a pledget of cotton wrung out in a solution as hot as the hand can bear.

Now, if it is a single lesion, it may be painted thoroughly with pure creasote after it has been opened and scraped. This agent will have an excellent effect and its application is not likely to cause much pain. Should the patient complain of pain the creasote can be washed away. Now the parts are best dressed with iodoform. The powder is dusted in until a heavy coating lies upon the raw surface, then any cavity remaining unfilled is to be packed with gauze impregnated with this same drug. Over this is to be placed a large pad of absorbent cotton and the whole bandaged in place.

This is to be changed at least once a day at first. If it improves and but a slight discharge occurs which does not soil the dressings in this time, the intervals between changes can be lengthened.

Not infrequently these small tubercular lesions are multiple. In such a case, if general anesthesia will be permitted, they can be opened, the diseased tissue cut or scraped away and our application made. In such a case it is well to follow the cutting away of diseased tissues by the actual cautery. In this way, we more certainly destroy diseased tissues, and excite an irritation, which will interfere with the progress of the condition. Following the cautery the parts are to be dressed as previously described. All projecting flaps of skin should be trimmed away in all these operations, absolu'ely no overhanging edges being left. Probably no point is of greater importance, than this thorough trimming of the edges of the ulcer, abscess or fistula.

In some cases the patient will be very loath to submit to a general anesthetic, owing to the extent of a single lesion, or in the presence of several nodules the physician will hesitate to operate with the local anesthetic. An effort in the infiltration anesthesia can be made, in these cases, with the consent of the patient, and with the understanding that the process may not be completed as satisfactorily as where he consents to general anesthesia. In such a case as this, the operator should resort to the very weak cocaine solutions. These are to be injected until all the tissues, which are to be operated upon are tensely distended with fluid. For these solutions the cocaine can be used one grain to the ounce of boiled water, or for a more extensive infiltration one grain to two ounces.

Where the abscess has ruptured it is to be treated in a way similar to that previously mentioned. Here, in lieu of opening the abscess, the edges are to be carefully trimmed away. All overhanging edges removed, perfect drainage is secured and free access to the affected parts.

Where good results are not secured by the use of the iodoform or the creasote, other agents may be tried. Strong carbolic solutions or the pure liquified drug may be used. Formalin solutions in various strengths may be tried. Methylene blue has been found useful. Others are fond of salicylic acid, though these applications cause considerable pain.

Volumes could be written regarding the constitutional treatment of tuberculosis. Here the treatment will be much the same as in any form of this disease, where the general system is depressed. Hypophosphites, cod liver oil, iron, arsenic, strychnia, creasote and guaiacol will be indicated according to the particular case.

Feeding, outdoor exercise, hygienic precautions and freedom from mental worry are all important in the management of the tuberculous, no matter where the lesion or lesions.

Where there is an abscess which has reached dimensions, which preclude an operation with local anesthetics, we will here have to deal with a process, which if neglected will do great damage. We must treat it radically. The patient is to be thoroughly prepared for operation by cleansing the intestinal tract, and flushing the kidneys by encouraging the ingestion of liquids. The parts are to be thoroughly cleansed before operation and it is advisable to use repeated irrigations with bichloride or some other strong antiseptic agent. These are to be followed by plain water to prevent the retention of any considerable quantity. By such preparations extending over a number of days our patient is, when the time for the operation arrives, in the best possible condition to submit to a procedure, which will secure the removal of all diseased tissue.

When the patient is examined at the time of operation, it may be found that the greater part of one buttock may be undermined by the process. But one course offers promise of a cure in a majority of cases. This may demand the removal of a large area of skin and subcuticular tissue. Diseased muscular tissue must be sacrificed as well where it is found diseased. The only muscle which we must respect is the sphincter ani. It, even if badly diseased, must be respected, as its loss of function would place the sufferer in a deplorable plight.

In hospitals we find the lithotomy position most convenient for operation. In private practice, where the operator is working at the home of the patient without a special surgical table, the lateral prone position will prove more convenient. The object is merely to get the patient in a position so that the parts are accessable and so, that the surgeon can work unhampered.

The cavity is to be split open in any direction, which you feel is most convenient. The incision is to be made to the limit of the cavity. A grooved director may or may not be used as you choose. Now clear away overhanging flaps with a strong pair of scissors. If a bleeding point is large enough to spurt, snap on a pair of hemostats. It will not need tying in a great majority of cases if the forceps are permitted to compress it for a few moments. Don't think about the size of the hole you are making in the man's buttock, or the time it will take for it to heal, but with a sharp eye and a good light search keenly for diseased tissues and remove them. Two things will guarantee healing—the absence of overhanging flaps of skin to act as mechanical irritants, and the absence of diseased tissues.

The patient is to be confined to bed but a very short time following the operation. He is not encouraged to over exert himself, but the benefit of fresh air and sunshine will decidedly hasten the convalesence. While a raw surface may be left which will be months in healing it will not interfere with the patient's comfort.

The raw surface is be dressed with iodoform gauze following the operation. This is to be changed daily after washing the parts with warm water. As soon as the patient is about this may be left to him. He can do it without hurting himself.

Where the operation is sufficiently radical and all diseased tissue removed the parts will heal even though the patient is suffering from an advanced pulmonary lesion.

FRACTURED FEMUR.

By H. A. Giltner, M. D., Lexington, Indiana.

On December 28, 1902, I was called to see a boy seven years of age who had injured his left leg by a fall on the ice. The accident had occurred about 2 o'clock p. m. and it was then 7 o'clock p. m. On examination I found a comminuted fracture of the upper third of the femur with great amount of swelling.

I had a fracture box made, the inner side extending from the ankle to the groin, the outer side from the ankle to the axilla. The box was then filled with cotton and the injured limb placed in it. The upper end of the outer side was bound to the body with strips of bandages. Buck's extension was then applied, using a weight of eight pounds.

This dressing was allowed to remain for one week, at the end of which time, the swelling having subsided, it was removed, a new Buck's extension applied and a plaster bandage reaching from ankle to groin was put on. On the outer side of the thigh the

turns of the bandage were run up several inches farther than on the inside, thus giving further rigidity of the hip.

This dressing was allowed to remain for three weeks, when union was complete. A light cardboard splint from knee to hip was applied and passive motion was begun.

At the end of the fifth week from the time of the injury the patient was placed on crutches and allowed to walk about the house.

There is about half an inch of shortening, which is really desirable at his age, as the injured limb will grow faster than the other. Taking all together excellent results were obtained; better, I think, than could have resulted from ordinary splints throughout, as most surgeons recommend at this age instead of plaster. If I could have seen the patient before the swelling was so great I would have applied the plaster of Paris at once.

I always cut through the dressing before it sets and then apply a bandage around it. This allows of expansion being made for swelling, is easier removed and is just as firm.

Whenever I get a dressing of this kind on a fractured bone I feel as though I have it safe. No slipping or moving of fragments.

UNSANITARY SCIENCE.

By C. E. Boynton, B. S., M. D., Los Banos, California.

There is something tonic in a belief in a future life. The man who feels that death ends all, lives upon a strain. The writer speaks from experience, for from fifteen to thirty-three years of age he was a materialist and atheist. Supposing even there is no proof of a future life, as a matter of hygiene alone it is better to believe there is such a life. It makes both the moral and physical man better. The atheist and agnostic is more or less of a pessimist, and a pessimist is a sick man When science has gained such a monopoly of a human brain that faith must vacate things are becoming pathological in that brain. If a man is an atheist it is harder work for him to control his temper than if he is imbued with the spirit of christianity.

Never hate anybody is a good and safe rule. "Don't cry over spilt milk," but rather crack a smile when the milk spills; thank the Lord it is no worse and go on.

Getting mad is one way of getting sick, and the inhibitory nerves that control the temper, if in good tone, will allow of no recklessness. The man who says "I don't care" is getting "slightly off." He should read and reread the sermon on mount and let its spirit permeate his whole being.

Suppose two men each lose all their property by fire. One is a christian, the other is not. The christian explains, "The Lord giveth and the Lord taketh away. Blessed be the name of the Lord." The other curses and is angry, bewailing his misfortune. Which mind is the most normal? Which man's health is most liable to suffer through mental condition resulting from the mishap? One man is still happy, thankful, hopeful; the other is disgusted, angry and discouraged. It is plain enough to any one that the condition of the second man leans most to the pathological. Some will remark that it is not necessary for a man to be a christian in order to take misfortune bravely, but allowing that each man valued equally his lost possession and would be equally complicated by the loss, the faith and grace upholding the one and not the other are traits that go to make up the christian ideal of manhood. To argue that matter would be to quibble upon a word.

Two men are slandered. One forgives and prays for his slanderer, the other nurses hatred and plans revenge. The first makes peace, the second makes war. Peace is healthier than war.

One man says, I shall live forever, the other man says I see and feel no hope, other things being equal which man can endure the most hardship or disease and live, evidently enough the first. But the skeptic asks what proof has the first man that he will live forever; the same kind of proof that we all have that we shall not cease to be after we go to sleep. It is the proof of faith if faith can be called proof. If faith is not proof then from experience the writer can say it is practically just as good. Then why quibble about the words faith and proof? If there is a road to annihilation it is the highway of doubt. If there is a road to future life that road is more apt to be found by the man who says, "I shall live forever; you cannot kill me I shall live." Man makes his immortality.

Remember, kind reader, eternities' power
Can not in their great strength turn this small will of ours.

And do the animals live hereafter? I hear someone ask. They would if they only knew enough, I should say. The man of much learning who says there is no God and no immortality reminds me of some one who builds a house without a door or window all of books and remains inside in the darkness surrounded by science.

In building an education to the writer it would seem more reasonable to see that there is a door and window in the same and not to get so enthusiastic in the building business as to leave out these little items. The agnnostic may be a fine man: he may be very brave but never the less he is attempting to live in a dungeon and such a life is very unsanitary.

IRRITATIONS OF THE RESPIRATORY MUCOUS MEMBRANE.

By Edw. C. Rothrock, M. D., Philadelphia, Pa.

Where there is irritation, an engorged condition of the respiratiory mucous membrane, an exhausting, hacking cough, remedies to allay the irritation, relieve and give rest to the patient, are called for. Morphine or opium will give relief, but other remedies will be mentioned in this article in connection with this condition. In acute inflammatory conditions of the respiratory organs, as bronchitis, laryngitis, pneumonia, etc , remedies must at first be used to reduce the hyperesthesia of the bronchi, alveoli, etc., as the case may be, and throw off the inflammatory condition existing, remedies not only to allay inflammatory action but to enable the mucous membrane to secrete and throw off the morbific products. The frequency of throat and lung troubles, and their serious nature, make the subject of treatment of the greatest interest. In such cases inflammation often spreads rapidly by continuity along the bronchial mucous membrane until the lungs, small tubes, alveoli, etc., are involved, constituting pneumonia, broncho-pneumonia, capillary bronchitis, etc. Such conditions frequently occur, particularly in children in whom the structure of these organs is very prone to quick inflammatory action and extension of that action. The bronchi become plugged with mucus which in young children is not expelled, which may lead to collapse of adjacent areas of lung and extension of the disease, and respiration becomes embarrassed. In the early stage the physical signs may be and often are masked and therefore the diagnosis is frequently not made until the disease is well advanced. The early recognition of the

grave nature of such troubles and prompt measures of treatment, both medically and to sustain the vitality of the respiration and the circulation are important. The elevation of temperature will often aid us to form a proper diagnosis frequently when the physical signs are not recognized. These signs vary greatly as to location and extent of involvement of the pathological process. The fine rales heard on deep inspiration frequently escape notice but respiration will always be accelerated and often labored, and as the disease progresses, dyspnea, high temperature, dilation of the alae-nasi, recession of the soft parts on inspiration appear. These symptoms are more marked in children. Prostration is often present, even in the first stage, and will indicate the treatment to maintain the vital forces.

As to treatment, the first consideration is the respiratory function, to clear out the irritated bronchial tubes, by prompt liquefaction and expulsion of mucus, and in infants prevent its absorption. The free access of the pure air to the diseased parts will be of the greatest advantage. The air of the sick room should always be as sweet and pure as ventilation can make it; windows should be opened at the top. Draughts are to be avoided of course, and an equal temperature should be maintained.

The respiratory tract must be kept free and clear as much as possible. In children the nostrils are often plugged up by secretions which collect in these parts und often embarrass the breathing. Vaseline inside and outside the nostrils frequently is of use and effectual. Free irrigation with a warm alkaline wash, as a half teaspoonful of bi-carb soda, or the same amount of borax or half teaspoonful of boric acid to tea cup of warm water will be effectual in relief of the occlusion. In young children under four or five years there is very little expectoration if any. The mucus that collects in the bronchi and sometimes coughed up should be removed by the fingers of mother or nurse and not allowed to be swallowed; this will be of great relief. The respiratory muscles are weak and the walls of the chest are soft and yielding and the movements of the thorax in the act of respiration very easily become embarassed in young children when mucus is allowed to collect in the bronchial tubes and is not expelled. The muscles of respiration are greatly impeded often causing congestion and collapse of areas of lung.

Ammonia is a valuable agent to clear the bronchi, the carbonate or muriate is very useful, the carbonate of ammonia one to two grains given in syrup or milk every one or two hours, according to urgency of the case and would not be too much for a child one or two years of age. Aromatic spirits of ammonia is a nice preparation and could be used in doses of 10 to 20 drops, water 2 oz., teaspoonful every hour or two. We get the stimulation of ammonia and its expectorant effect. The syrup of ipecac is a good old remedy. The wine of ipecac is also good in doses of one to two drops for young children.

The acetate syrup of sanguinaria in doses of five drops to twenty drops according to age of child every two hours is prompt to relieve. Sanguinaria is a valuable remedy and in croup is near specific; in pneumonia it is very useful; in chronic nasal catarrh, hypertrophy of nasal mucous membrane, by insufflation it is curative; in acute or chronic bronchitis and asthma it is prompt to relieve and cure. It is an excellent expectorant in small doses. Sanguinaria $\frac{1}{8}$ to $\frac{1}{16}$ gr. is a dose for adults and can be used in place of syrup, but for children the syrup is preferred.

Temperature is frequently high, 105.5° and over; to reduce temperature, aconite $\frac{1}{4}$ to $\frac{1}{2}$ drop should be given to children, one to two years old, every hour or every half hour as indicated untll temperature abates, then every three hours. Aconite should be used with care; it has an selective action on heat centers and is one, if not the best of medicaments to overcome inflammatory action. For adults aconite, spec. tinct., 1 to 2 drops is the dose, some could take more, but small doses have better effect. Aconite has been called the "therapeutic lancet." A lethal dose produces great muscular weakness, irregular and labored respiration, slow and weak pulse, coldness of the surface, clammy sweat, tingling in extremities and lowering of body temperature. Death is from paralysis of the heart and respiration caused by relaxing the inhibitory apparatus of the heart, hence, paralyzing the cardiac ganglia, the spinal cord and respiratory functions. Aconite properly used is one of the most valuable drugs we have antagonizing the fever process and is a power over the circulation, respiration and transpiration. It is of greatest value in cases characterized by high, hard, resisting pulse, dry and hot skin, and high body temperature. In acute throat affections, aconite 1 drop every hour is very useful, as tonsillitis, pharyngitis etc. In acute pleuritis, bronchitis, pneumonia, in fact all acute inflammations of the respiratory organs from whatever cause where the pulse is full, hard, and elevation of temperature, aconite is indicated and if used rightly and where it is called for, it will do good every time. I have used aconite frequently with great advantage in puerperal fever. In scarlet fever and measles it is very useful. Small doses repeated in measles are very efficient in arresting impending catarrhal pneumonia.

Counter irritation to the chest is very useful, as mustard. A warm mush poultice with turpentine dropped upon the poultice and applied over the chest is of great benefit and should come up well on to the neck. A flannel well soaked in tallow sprinkled with turpentine applied warm and allowed to remain for twenty four hours is good. I have kept such plasters on for days with much relief. It has a tendency to draw the blood to the surface from the engorged parts, keeps the skin moist and at a uniform temperature and greatly adds to the comfort of the patient.

A constant cough disturbing the patient is relieved by breathing warm, moist, air; a vessel containing warm water, and a few drops of turpentine, is good. So is camphor in the water or used as an atomized inhalant. It is very agreeable to the pulmonary organs and could be used every three hours and oftener if the irritative cough is very troublesome. Codeine $\frac{1}{5}$ to 1 grain for adults, for children $\frac{1}{32}$ to $\frac{1}{16}$ grain as to age, is very valuable in irritation of the bronchi where there is a hacking, teasing cough. It is less constipating than opium and no doubt but what it has a selective sedative influence on the pneumogastric nerve. Dionin, Merck's, in doses of $\frac{1}{8}$ to $\frac{1}{4}$ grain is very useful. For children the dose is $\frac{1}{32}$ to $\frac{1}{64}$ grain according to age. Where the cough is harassing and very troublesome dionin will relieve it. Dionin is also useful in insomnia. A loose irritative cough from a relaxed condition of the throat with tickling, dionin will quickly relieve.

A supporting treatment in disease of the respiratory organs will nearly always be needed in children from the first and indeed frequently in adults. An easily assimilable nourishment must be used, milk, sweet and fresh; rice, raw fresh eggs well beaten or very soft boiled eggs, meat broths, etc.

(to be continued.)

Rundschau.

By H. Speier, M. D., Rochester, Minn.

ON GONORRHEA.

"Can you cure gonorrhea? Tell me how." Such was the appeal the writer found not long ago in the letter of a valued medical friend, a very intelligent man of more than twenty years' extensive general practice. He was up against it, in a case in which every possible treatment had failed. Perhaps some reader of the Rundshau might have helped. We all meet such cases occasionally and they bring us despair. That gonorrhea is a serious disease is now generally understood by physicians. German authorities tell us that at least 85 per cent. of inflammatory disease of the female genital organs is due to gonorrhea. We are familiar with the fact that the largest amount of female suffering dates from marriage. Now sexual intercouse between healthy persons is a physiological process which should not result in a diseased condition. It is the wide prevalence of gonorrhea among the males and the carelessness with which it is treated which are responsible for the numerous ills of the female following marriage. According to Neisser, of gonococcus fame, in European cities fully 75 per cent. of the population have had gonorrhea. For America 40 per cent. of the males is probably the right proportion. While the claim made by some authorities, that gonorrhea is never cured, cannot be conceded, it should be understood that as a rule the power to infect remains for a long time after all discharge has apparently been stopped and the microscope no longer reveals specific cocci. When certain complications have arisen permanent lesions are apt to result. Routine treatment of gonorrhea for the most part is careless and effects only about 25 per cent. of complete cures. The remainder becomes responsible for the large amount of inflammatory disease in married women. The ideal, specific treatment has not yet been found.

REPAIR OF LACERATIONS AFTER LABOR.

Certain medical questions will not stay settled, but from time to time furnish topic for fresh and vigorous discussion. One of them is that of immediate repair of the maternal soft parts after labor. Obstetricians agree on the necessity of prompt attention to lacerations of the floor, the perineum and vagina, and the race of physicians who in a large obstetrical experience never saw a laceration, is happily dying out. Even the public has become educated to a recognition of the fact that tears are unavoidable, and properly inclines more to blame the man who does not, than the man who does sew up. The controversy arises over the management of a lacerated cervix. The difficulties of repairing it at once after the completion of labor are considerable. The normal relation of the parts is disturbed, the cervix is obliterated and scarcely perceptible for a week. The real extent of tears of the cervix cannot well be estimated at that time. Many of them are repaired by nature and only those which develop ectropion become of pathologic importance. All the tissues are very flabby, so that they do not hold the stitches well. Considerable benefits are claimed for immediate repair. There is said to occur a prompt

checking of hemorrhage, lochial discharge is lessened in amount, involution goes on more rapidly and completely and general convalescence is hastened.

The subject was discussed at the last meeting of the American Association of Obstetricians and Gynecologists and the concensus of opinion among the specialists was in favor of immediate repair of all such injuries. More opposition developed in discussions before the New York State Medical Society and one of central New York, but there also the cause of operative work was in the ascendency.

Theoretically considered it is evident that a woman is entitled to immediate attention of any accidental lesions, so as to save her from future complications. We may expect repair of recent lacerations of the cervix to become just as much a generally recognized operation as repair of the perineum is today, and its technique so simplified that the general practitioner will be ready to undertake it.

SCIENTIFIC MEDICINE AND THE IRREGULARS.

At the present session of the legislature of Minnesota a bill has been introduced calling for the establishment of a special state board of examiners for osteopaths. Such a measure was up two years ago, when it showed unexpected strength, and was defeated only by tall hustling on the part of physicians. The fight is su.e to be renewed session after session, uutil they gain their victory. And they will win —we might just as well make up our minds to that—in this and other states, for they are determined, and the mass of the people seems always and everywhere to take sides against scientific medicine.

That quackery and all kinds of medical fads flourish, cannot be attributed to ignorance alone, for they find their best support among most educated and intelligent classes. Does not the reason lie rather in the more or less conscious desire to be healed of disease by simple and natural means, without the use of drugs or knife? This is the great boast of osteopath, scientist, magnetic healer and the whole ilk. It is the bait which catches the public. It is not all empty boast, either. They get results. We know it and the people know it, too. There is, for instance, an advertising "quack" in one of our river towns who does exactly the same work as the celebrated Viennese professor, Lorenz, and has unquestionably fine results. His way of making his ability known is not orthodox, but the public does not care. We cannot explain results away; least of all, can we ridicule or sneer them out of existence. When we try to do it we help the irregulars, and we are doing that constantly. We would be wiser to learn their empirical knowledge and adopt their methods of work, depend less on drugs, pay more attention to hygiene, mechanical therapeutics and mental and moral influences. In those departments scientific medicine is weak, the irregular strong.

HYPERTROPHY OF THE PROSTATE.

Dandridge enters a protest (New York Medical Journal) against the marked tendency of the present time to subject the victims of prostatic obstruction to mutilating operations. In nearly every discussion on this subject the necessity for early operation is pointed out, in order to avoid the danger of operating later, when the kidneys are permanently damaged. Herein lies the danger, as the success of the method is likely to encourage useless, and perhaps, harmful operations. He is strongly convinced that the method of choice in the largest proportion of cases of hypertrophy is the judicious use of the catheter.

DISCUSSIONS.

This Department contains each month case reports, letters, inquiries and replies from our readers. If you have a case you would like some help with, or a question to ask, write to us and we will publish it in this Department and you will get the opinions of our medical brethren. When you have an interesting case, write a report of it and send it in and it will help some one else. We need each other's counsel so let us help each other from our experiences. Letters are desired from physicians on any subject pertaining to our profession.

MORE EXPERIENCE.

In my last article I was about to quit my job and go out on a "tooth pulling by the painless method" tour, but looking through the clouds I can see a little tinge of gold on the other side.

I see by an ad in one of my journals that I can send $3.00 to an M. D., in another state and he will tell me how to cure the piles and many other rectal diseases; also another who will send me a remedy for constipation for only $2.50; and another who proposes to teach me to cure neuralgia for $2.00; and others running from $1.00 to $500 to learn me how to succeed in my business. So I am again with the fraternity striving to relieve the sick and suffering, and keep the children from being cold and hungry.

But this climate is so different from the mountains, seven or eight hundred miles north of here. While there I have waded the snow and walked four or five miles to see a patient, and then perhaps got an old banjo or a sheep for it.

I went to see a sick child three times about four miles from my boarding house and was paid two hound pups for it and the man thought he had paid me well. All the midwives were my friends and they were pretty numerous. One old lady had a cancer on her nose and I tried to get her to let me cure her but, she said that she was already in the hands of a man who could cure any kind of a tumor by conjuring her, and it would not do to let one of these medicine doctors do anything for it until he found he could not break the spell. She was the most popular of all the midwives in that country and I guess many cases of carcinoma started from that nose. But she was sent for far and near when the children got sick, and she always sent for me when she needed consultation, which was not often until the little fellow was past all hope of recovery. One of her favorite remedies was nine squirrel shot in nine spoonfuls of sweet milk, boiled nine minutes, for thrush. If that wouldn't cure it she would stand a pine brush up the chimney and it must be forked if the infant was a girl. So she would treat the children and the last time I was ever called to see one of her patients she said that that was 376 babies for her, besides what she had caught for other doctors.

It was while there that I learned that twenty drops of norwood's tr. veratrum would cure nearly every case of puerperal eclampsia. Dr. D—, a friend of my father sent for me, to meet him at one of his patients about ten miles from my home. I hurried to him as fast as my horse could pace and that was pretty fast for in one hour and ten minutes I was at the gate where I was met by the doctor. He told me that Mrs. M. was just through her twenty-fourth convulsion that she had been delivered some hours before, been bled, kept under chloroform, cold applied to her head and heat to her feet, but she still had convulsions. When satisfying myself after a thorough examination, of the extreme condition of the patient I only recommended a hypodermic of morphia sulphate one-fourth grain. The patient died in great agony in an hour or two after my arrival.

I wrote an old uncle in Alaska, who had been practicing medicine for fifty years, about the case and he wrote

me to give the next one eighteen to twenty drops of Norwood's tr. veratrum hypodermically and I have always followed his advice, and have had no more deaths from puerperal eclampsia.

I have also learned by experiment that three to five drops Norwood's tr. veratrum will often give immediate relief in headache where the face is flushed and eyes congested, and I prefer it in a great many cases to the coal tar preparations.

F. G. THOMASON, M. D.,
Kissimmee, Fla.

MULTITOXINE.

Like many other physicians, I have long entertained the idea that medical science should be able to cope successfully with the most formidable disease, but lack of exact knowledge has left the profession seriously handicapped. Take, for example, the subject of tuberculosis, and comparatively few physicians base their treatment upon the known facts underlying its causation. While it is true that they take note of the various factors which may have united to produce the condition, and they record faithfully their opinion as to the primary and secondary causes, the predisposing and determining causes or the controlling and exciting causes, they lose sight of the entity responsible for the persistence of the disease. The prime factor is the tubercle bacillus, a fission fungus or mold belonging to the order of schizomycetes.

Theoretically, the remedy demanded is one which will exert an antidotal effect upon the fungus, but the only measure which promises relief, it will be evident, must be based upon an exact knwledge relating to the conditions which modify the growth or multiplication of schizomycetes. A schizomytoxine" might be employed with success where the infection was circumscribed and so isolated that the affected area could be charged, as in the case of tubercular adenitis, or localized pulmonary tuberculosis, but ordinarily, we must depend upon constitutional treatment through the medium of inter-cellular medication. As a consequence, our remedies, whether introduced through the stomach or subcutaneously, lose their specific or selective action before reaching the affected area; hence, there is no direct action upon the fungus from the use of creosote, one of our most efficacious remedies in tuberculosis. Another illustration might be given here. Creosote, taken internally, quickly cures a cold and relieves cough, but the same is true of petrolatum jelly, an inert substance, and no one pretends to claim that the benefits are due to other than local action upon the contents of the alimentary tract, inhibiting the absorption of poisons. Creosote, I must admit, in addition to this, possesses distinct medicinal properties, but not in the direction usually accredited—as an antiseptic. Instead, creosote being distributed through the medium of the body fluids, the cells "respond" to the irritation and produce substances (enzymes or defensive proteids), which retard the development of schizomycetes, and thus in a measure, control tubercular infection.

In other words, by the administration of creosote or almost any other remedy of its class, we endeavor to educate the cells so that as a result of this functionation the bacilli shall cease to grow; but it is a slow process and requires almost infinite professional skill and ingenuity with religious attendance to details on the part of the patient. My idea is to make the cells work more actively, and especially against the fungus, so as to produce appreciable effects within a few hours, as is now done in the case of diphtheria and tetanus, and as an

evidence that the plan is not utopian, I have ample clinical proof. Cough and expectoration quickly subside—in the course of a few hours—and all the characteristic symptoms of tubercular infection quickly disappear, including the bacilli after a comparatively short period. We have then to treat the patient for debility with organic or structural changes and we must take the necessary precautions as to diet that excessive acidity shall be avoided, since hyperacidity, if not the exciting cause in tubercular infection, is undoubtedly a frequent predisposing factor.

Multitoxine, as the name implies, is a combination of products—alexine and formalin—which are toxic to certain forms of vegetable growth. Thus, the diseaee known as "potato scab" is nothing more than a fungus growth, also belonging to the order of schizomycetes like the tubercle bacillus, and is quickly destroyed by a weak formalin solution, while the young potato sprouts are unharmed. I assume that the good effects due to formalin in tuberculosis must arise from some catalytic action, since it is impractical to saturate the human system owing to its poisonous properties. We should endeavor, therefore, to educate the cells to produce enzymes in response to the introduction of this foreign substance. It occurred to me that advantage might be gained from the conjoint employment of sozin or alexine, assuming that the latter would comply with the scientific requirements of an "intermediary" body, i. e., the "anti-body" in tuberculosis which is composed of an intermediary body and complement, this latter body being found normally in the organism, supposed to be contained in the cell ferment of the protoplasm, although only the intermediary body is increased during the process of immunization.

Briefly stated, the object in treatment by the various sera is to create such physiological conditions within body fluids that bacteria are liquified and their toxic action neutralized through increased cellular activity, and thus is foreshadowed the far-reaching significance of physiological cell medication. Serum therapy must be regarded, therefore, as the most conspicuous example of its practical adaptation in the treatment of disease.

Multitoxine is a twenty per cent. alcoholic solution containing ten minims of alexine and one minim of formalin to half a drachm, and this is the usual daily dose for the period of one week. As a rule, the bacilli have disappeared at the expiration of this period and subsequent medication will be required only to overcome new arrivals, or to meet the migration of bacilli previously encapsulated until such time as nourishment has advanced resistance to the normal standard. By this method of treatment as much is accomplished in the first week as could be expected from the most favorable treatment within six months, and the patient begins to recover almost as soon as the first injection is administered.

JOHN AULDE, M. D.

Kennett Square, Pa.

A GYNECOLOGICAL EXPERIENCE.

A case like the following is so commonplace that it hardly deserves room in a medical journal. But then, the sum of our practice is made up of ordinary and common cases and our success depends more on our management of the commonplace case, than an occasional brilliant achievement.

Mrs. C. L., Irish, aet. 28, married five years, never been pregnant, although desirous of offspring. Thin, delicate, slightly anemic, appetite fick-

le with occasional short spells of constipation, nervous, fidgety. Commenced to menstruate early, fairly regularly, with a good deal of pain in back and abdomen, leucorrhea in intervals, even when a girl. Was a teacher for several years and during that time her ailments increased. Physical examination gives negative results. A little ovarian tenderness on deep pressure in groins, also upwards in vagina, some thickening in left lateral ligament, but not of tube. Uterus of normal size, slight retroversion, cervix of proper shape, not elongated, os normal. Heart, lungs and abdominal organs sound. Some years ago uterus has been curetted by a competent man, with very temporary, if any improvement. Recently she had consulted some prominent surgeons with a view of having an operation done on the pelvic organs. They refused to do one.

No organic disease can be made out in the case. Still she is far from well and has frequent accesses of what we must call ovarian and uterine colic. Just a case of profound functional disturbance. She has been to many physicians and taken a lot of medicine. Off and on for two years she has been a caller at my office, unwelcome, because I did not help her much. I gave her for some vaginal tampons with glycerine and ichthyol which diminished leucorrhea and relieved local tenderness. Internal medicine has chiefly been peptonate of iron and fluid extracts of cimicifuga and viburnum opulus. Lately, when she came again and took up too much of my time, in order to get rid of her and be doing something new, I gave her a small bottle of Hayden's viburnum comp. which I happened to have, with instructions to take a dose semi-occasionally, when she had these pelvic and abdominal pains. I builded better than I knew. She reported soon, full of joy, that she had never had any medicine which relieved so quickly and the effects of which continued so long. It has since then been of uniformly good service to her, not a cure but a sure and speedy relief from the worst symptoms.

Profiting by the experience thus gained I have prescribed the compound in a few other cases, such as come frequently to the physician and whose treatment is seldom satisfactory. They were all of the dysmenorrheal type, several in unmarried women, usually with scanty menstruation and more or less leucorrhea. No organic disease being present, the cases had to be classed as of functional disorder. The remedy proved itself valuable in every instance, furnishing relief with greater certainty and promptness than any other I have ever used. Judging from the name, viburnum comp., I suppose its main ingredient to be some form of the viburnum opulus, cramp bark, which indeed has for many years been a favorite remedy of mine in menstrual and uterine disorders. But I have never been able to devise a combination as effective as this compound.

Gynecology has of late become more and more a prey of the abdominal surgeon. Where formerly at meetings of large medical societies the section on diseases of women used to be crowded, it is now nearly deserted. The knife is being resorted to, when a diagnosis has been made, or when one is to be made. If we, the general practitioners, can find a form of treatment, even though it be that bugbear a proprietary preparation, by which we can help our patients and thus snatch some of our legitimate business away from the surgeon, we ought to welcome it.

H. Speier, M. D.

Rochester, Minn.

In neurasthenia suggestion is a therapeutic measure of great value, if properly used.

AN INTERESTING CASE.

A young married woman was told she had ovaritis and would have to submit to having the ovaries removed, which was done first on one side; after the lapse of a few months on the other side. She was apparently in good condition for several weeks, when hemorrhage set in, which continued for five months, in spite of all her physicians could do to arrest it, even for an hour. Patient was in a very precarious condition when I was appealed to for help. Patient living hundreds of miles away from here, I had to treat her by guess, not being able to obtain any information from her physicians as to what treatments and remedies had been resorted to. She was unable to make the trip here and I was unable to leave here just then. I put her upon following treatment: Atropine $\frac{1}{250}$ grain granule every hour, continued up to physiologic effect, then one every two or three hours to keep up said effect; also 30 grains of calcium chloride per diem in 6-grain doses; I also gave a good blood maker, four doses a day.

The tonic was a combination of a bottle of Russel's emulsion, a bottle of manola and a bottle of bovinine, with four ounces of liquor mangan-ferri (Gude), and an ounce of arsenaura. Dose, tablespoonful 4 times daily. The atropine, after being continued for a week, to be followed by hydrastinine, 1-12 gr. one every four hours. The alkaloids used were of the Abbott kind —always reliable. Douches of hamamelis ʒj, boracic acid ʒij to pint of water as hot as could borne, twice daily.

I was advised after ten days of this treatment hemorrhage had completely ceased and patient doing well.

WILLIAM B. MANN, M. D., Ph. G.
Evanston, Ill.

TONSILITIS.

As this is the time of year that we have a great deal of tonsilitis, I will give the Recorder brethren my formula for the easy and quick cure of the same. I have no trouble curing my cases of tonsilitis and diphtheria. Jaborandi is what I depend on; it is a very valuable drug if procured pure and used properly. The uses of it are many and varied, as can be seen by your materia medica, but I use it chiefly in tonsilitis and diphtheria. My formula for tonsilitis and diphtheria is

℞ Jaborandi, ʒij
Aconite, fluid extract,
Creasote, a a, mx
Glycerine, ℥j
Aqua, q.s. ad., ℥iv
M. Sig. A teaspoonful every hour, for adult; children in proportion.

Try this formula on your next case of tonsilitis and you will be surprised at the quick results you will get from it, or on your next case of diphtheria, and see how quickly the membrane will loosen up.

W. E. NICHOLS, M. D.
Andrews, Ind.

TUBERCULOSIS CONGRESS.

The next meeting of the American Congress on Tuberculosis will be held in St. Louis, Mo., U. S. A., July 18 to 23, inclusive, 1904.

For the purpose of completing the organization of the International or World's Congress on Tuberculosis on strictly ethical lines an advisory committee of well known physicians has been formed to assist the council in perfecting plans for the meeting.

GEORGE BROWN, M. D.
Atlanta, Ga. Secretary.

The Wisconsin Medical Recorder.

A Monthly Journal of Medicine and Surgery, devoted to the best interests of the whole profession.

J. P. THORNE, M. D., Editor and Publisher, Janesville, Wis.

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Original Articles are solicited from our readers. We wish articles which are sent us to be contributed exclusively to this magazine. We will send the writer of any original article, if desired, twenty-five extra copies of the number containing the article. We are also willing to send copies to the professional friends of the author.

Letters, Case Reports and **Questions** are desired for our Discussion Department.

Society news and reports and items of interest are gladly received.

Vol. 6. MARCH, 1903. No. 3.

EDITORIAL NOTES.

This is an age of the world when many live largely on canned foods. Cases of poisoning from this source, especially canned meats, are not uncommon. Dr. Grixoni, the Italian bacteriologist, has made a special study of this subject. He states that when a can of meat gives forth a splashing sound when shaken it is due to the liquefaction of the gelatin of the meat by bacteria. Although he says such meat will not always cause serious poisoning, yet it is never suitable for food.

Have you bound your 1902 Recorders? They make an elegant volume of over 400 pages. If you have not bound them, mail them to us and we will send you a finely bound volume, express paid, for only 65 cents. We have a few extra copies of each issue of 1902. As long as these last we will make no charge for missing numbers when binding the Recorder.

Many cases of chorea are due to eye strain, when a case of chorea does not yield promptly to treatment the patient's eyes should be examined and if any error of refraction is found it should be corrected by properly fitted glasses. This is all that is necessary for a cure in some cases, in others it is necessary also to administer the proper medicines.

The efforts which are being made to stop the general spread of bubonic plague promises to be successful. In Mexico the plague has been the worst at Mazatian. Everything possible is being done to stamp out the disease and it is on the decline. One or two deaths from the plague are reported every day at Mazatian.

Many new subscribers have requested us to send back numbers of this volume of the Recorder but we have been unable to comply with many of of these requests. The hundreds of new subscriptions received have entirely exhausted our supply of the January and February issues.

We wish again to request our subscribers to write name and address very distinctly or to send a printed slip. This is especially important in order to have premium labels correct.

Is your renewal to the Recorder due? If so, please send us your dollar for renewal and we will send you one thousand of those labels, the same as to new subscribers.

Money invested in books and medical journals brings good returns. The doctor who is up to the times gets the largest practice nowadays.

ALKALOIDAL THERAPEUTICS

Original articles, reports and notes on dosimetry are desired for this Department.

ALKALOIDS IN THE TREATMENT OF FEVERS.

Physicians who are familiar with the therapeutics of aconitine and veratrine in fevers are especially emphatic in their praises of these alkaloidal defervescents.

The summary on aconitine which we presented last month in this department has been commended by a number of physicians, who are beginning to use alkaloids. These physicians and many others will be interested in a paper on the alkaloids in the treatment of fevers, especially typhoid, which Dr. S. B. Miller, of Loraine, Wyo., read before the Rocky Mountain Inter-State Medical Society and which has been published in the Denver Medical Times.

Dr. Miller believes in establishing elimination by means of laxatives and intestinal antisepsis with the well known antiseptics. He also suggests that in the early stages of fever it may be possible to combat microbic infection with echinacea or the sulphides. We present the following extracts from the paper:

We now come to the treatment of fever, per se; and here again our practice is based on the soundest principles of modern pathology. For it is certain that the first step in every inflammation is the derangement of the circulatory equilibrium, whereby an excess of blood appears in the inflamed part, with necessarily a corresponding anemia elsewhere. Now, if we remove this excess of blood from the inflamed part, and restore it the parts that have too little, it is obvious that the subsequent steps of the attack, diapedesis of white cells, extravasation of blood, etc., cannot take place; and the malady is stopped—jugulated.

We may accomplish this in two ways—by increasing the tonicity of the dilated vessels, or by relaxing those that are contracted and empty. The first object may be secured by giving ing the powerful vasomoter tensors, strychnine and digitalin; and these constitute the chief means employed by many leading physicians in the treatment of pneumonia. The second may be fulfilled by the administration of the vasomoter relaxants, veratrine and aconitine; and the first named, under the form of tincture of veratrum viride, is perhaps the most popular remedy today in the United States for pneumonia.

Whichever is chosen, the same object is attained—the restoration of circulatory equilibrium. It is asserted that both these processes can go on together, the cells whose tonicity is below par taking up the tensors, while those in a spastic state absorb and utilize the relaxants.

At first sight this seems unreasonable, but when we reflect that every living cell in the body selects from the blood what elements it stands in need of, and rejects the rest, there is no special reason for refusing to credit them with a similar power as to the selection of medicines. And if it comes to that, is it so easy to draw the line between foods and medicines?

Besides, those who have put this theory to a practical test are unanimous in their reports, that the results are better than when either the tensors or relaxants, stimulants or sedatives, are employed alone.

The foregoing principles form the basis of modern treatment of fever, per se. Each special form of fever may require special additions or not, as the case may be; such as quinine for malaria, salicylic acid for rheuma-

tism, pilocarpine for erysipelas, etc. And in every case the duty of rendering the house and vicinity hygienically clean, or enforcing a proper administration of the sick room, of guarding against the spread of the infection, remains as imperative as of yore. In fact, the physician who believes in utilizing the resources at his disposal in the treatment of fever, will find his occupation strenuous enough to satisfy the most exacting.

But by the use of the alkaloids uncertainity gives way to certainity. An exact dosage is easily obtained, when an alkaloid is given but one effect may be expected, while in giving tinctures and fluid extracts, all of which contain several different acting active principles disappointment is too often the result.

The practice of the healing art will never become an exact science until the use of the cruder preparations give way to the active principles of plants as represented in the alkaloids. And today when alkalcids of most of the drugs used by the medical profession are readily obtained there can be little excuse for not prescribing them.

In closing, I think I am safe in predicting that the time is not far distant when tinctures and fluid extracts will be relics of the past, and all advanced physicians of the day will be using the arms of precision as represented in the alkaloids.

* * *

Hyoscine hydrobromate is an alkaloid which has given some very pleasing results in treating the morphine habit. Dr. Goldan has reported (New York Medical Journal) some good results recently. He says: The treatment consists in the frequent hypodermic injection of hyoscine hydrobromate, beginning with a very small dose, $\frac{1}{400}$ to $\frac{1}{200}$ of a grain to determine idiosyncrasy; the dose is repeated hourly, or frequently enough to keep the patient under its influence.

THE DOCTORS' LIBRARY

This Department contains each month reviews of the latest and best books. Items of book news will keep readers informed on progress in the world of medical literaure.

THE ELECTRO-THERAPEUTIC GUIDE.—By Wm. F. Howe, M. D., Ph. D., M. E., Vice President of the National College of Electro-Therapeutics, etc., and Homer C. Bennett, M. D., M. E., Ph. G., Professor of Electro-Therapeutics in the National College of Electro-Therapeutics, Editor of the Electro-Therapeutist, etc. Sixth Edition, Revised and Enlarged. Illustrated. Pages 178. Price, cloth, $1.00. Published by the National College of Electro-Therapeutics, Lima, Ohio.

Electricity is a therapeutic agency which has become of great importance in the last few years. The new developments in electricity and their scientific applications by educated physicians have proved very beneficial in the treatment of disease.

The practitioner who does not use electricity sees few indications for its use, but the physician who understands it sees uses for it in his practice every day.

This book has been prepared not for the electro-therapeutic specialist but as a guide or aid to the general practitioner. The authors first give their ideas as to what electricity is. Then follow explanations of the different forms of electricity and appliances used in their production and application.

Some space is devoted to the subject of the X-rays, which will be appreciated by the reader. Several pages are devoted to condensed facts on electricity for the general practitioner, who will find these few pages very helpful.

Especially valuable is the section of

the book devoted to electro-therapeutics telling where, when and how to apply electricity in practice. This section is arranged alphabetically by diseases so that it is possible to find at once the desired treatment of any disease. The glossary of electro-medical terms appended to the book will be found convenient for reference.

The fact that five editions of the book have been exhausted in as many years shows that the profession appreciates it. It is used as a textbook in the National College of Electro-Therapeutics.

The general practitioner will find the book a valuable addition to his working library.

REGIONAL MINOR SURGERY.—Describing the Treatment of Those Conditions Daily Encountered by the General Practitioner. By George Gray Van Schaick, M. D., Attending Surgeon to the French Hospital, New York. Pages 226. Illustrated. Cloth, price $1.50. Published by the International Journal of Surgery Co., 100 William St., New York.

This book is a result of eighteen years' practical work in surgery and is an original presentation of the author's experience. The book is not intended to supplant the larger books on surgery but to supplement them. Minor surgery is minor in name only, since the most trivial injury may be followed by disastrous results, and the only way in which to treat it is according to the same laws whlch hold good in the case of the greater achievements of modern surgery. Much of the minor surgery is in the hands of the general practitioner, who will be judged more often by his results with an injured finger than by those which he achieves with so much arduous labor in internal medicine and obstetrics. He must, therefore, feel competent to do minor surgical work in an aseptic, anatomical and practical manner. This book will greatly aid the practitioner to do this work properly.

The book begins with this bit of surgical wisdom: "From the surgical standpoint, no unsterilized object is clean, and the necessary corollary of this proposition is that none but sterilized objects must even be allowed to come in contact with a wound, or with a surface about to be wounded." The work abounds in surgical wisdom from beginning to end.

The author first briefly presents the subjects of asepsis and suturing, then beginning with the head gives the minor surgery of each part of the body. The work is one we are sure every practitioner will prize highly and refer to often.

The volume is well illustrated with 74 cuts and is nicely bound so as to be an addition to the doctor's library.

CLINICAL TREATISES ON THE PATHOLOGY AND THERAPY OF DISORDERS OF METABOLISM AND NUTRITION. PART I, OBESITY, THE INDICATIONS FOR REDUCTION CASES.—By Prof. Carl von Noorden, Senior Physician to the City Hospital in Frankfort, A. M. Authorized American Edition Translated Under the Direction of Boardman Reed, M. D., Professor of Diseases of the Gastro-Intestinal Tract, Hygiene and Climatology, Department of Medicine, Temple College, Philadelphia. Pages 59. Cloth, 50 cents. E. B. Treat & Co., 241-243 West 23d St., New York.

It is due to the disorders of metabolism and nutrition that degenerative changes cut short the activities of so many men and women in middle life—that in these latter days, senility and death itself come prematurely to a

large proportion of mankind. This volume is the first of a series of monographs in which these diseases are considered in a manner which is at once scientific and practical. They are based upon exhaustive experiments and bedside observations carried out during a period covering a number of years under the direction of one who is eminent both as a pathologist and a clinician.

Prof. von Noorden in this volume presents a clear exposition of the indications for reduction cures in obesity, and he states plainly that exact indications must be obtained in each individual case. The book is nicely bound in cloth with title on the back of the book, so that it makes a valuable library volume.

MEDICAL ETHICS AND COGNATE SUBJECTS.—By James S. Sprague, M. D. Half Morocco Octavo. Pages 250. Chas. P. Sparling & Co., Publishers, Toronto.

This book begins with the Oath of Hippocrates in Greek and English. Next follows the code of medical ethics and then a choice collection of brief addresses, poems and selections full of information, wit and meaning. Much of the material is from the pen of the author, but more is from various sources. Everything has its point, aiming at the elevation of the profession ethically.

The book is one that will not lie in the office unread. It is unique.

BOOK NOTES.

Dr. John Aulde, Kennett Square, Pa., has just issued a valuable booklet entitled "Therapeutic Index," a copy of which will be sent free to Recorder readers desiring it.

W. B. Saunders & Co., the Philadelphia publishers, have opened a branch in New York city in the Fuller building. The New York branch is in charge of Dr. Reed B. Granger, formerly managing editor of the New York Medical Journal.

The Annual Report of the New York State Hospital for Crippled Children has been received. It is an interesting thirty-two page pamphlet illustrated with half tones. Those interested can obtain a copy by addressing the superintendent, Dr. Newton M. Shaffer, Tarrytown, N. Y.

About April 1st, E. B. Treat & Co., New York, will issue a new edition of Dr. A. D. Rockwell's "Electricity, Its Medical and Surgical Uses." The work will be very complete and up to date. The physician wishing a thorough treatise on electricity, including X-ray, vibratory therapeutics, the Finsen and high frequency currents will find this book very satisfactory.

The International Medical Annual for 1903 will be issued next month by E. B. Treat & Co., New York. It will be a resume of 600 medical publications of the world prepared within brief compass, in easy, dictionary reference form, by a staff of thirty-three editors. It will be illustrated with plates, both colored and black and white, and will contain about 700 pages.

Tuberculosis, communicable, preventable, curable, by Addison W. Baird, M. D., is an interesting booklet published by James T. Dougherty, 409-411 West 59th street, New York. It is a popular presentation of the subject, with thirty illustrations, after the manner of lantern lectures. The public would greatly profit if it could be generally read and its teachings observed. The price, in paper covers, is 10 cents, postpaid.

The contents of Conkey's Home Journal (Chicago) for March shows more than any previous issue the policy of the publishers to make it a thoroughly practical home magazine, for 50 cents a year. The departments for women and girls include, among other things, the following: "A Practical Lesson in Embroidery Making," an illustrated lesson in "Home Millinery", "A Lesson in Home Dressmaking." Stories and good suggestions abound.

The Household continues to improve with each issue. Leading features of the March number are: "How to Know Great Pictures," by Mary Knight Potter; "The Wild Garden of Hardy Plants," by J. Horace McFarland, beautifully illustrated; "Half Hours with Nature," by Rosalind Richards. A great variety of good fiction by able writers is presented. In the departments special attention has been given to the springtime needs of the housekeeper, who will find plenty of good suggestions. If you want a good home magazine write for a copy to the Household, Union Square, New York.

The March McClures will not only be read; it will be talked about for many days to come. Lincoln-Steffen's "The Shamelessness of St. Louis" is an article that can't be dodged. Of distinct importance, also, is Samuel Moffat's article "The War on the Locomotive," which is a surprising revelation of what the trolley people are up to, in the new inter-urban development of electric travel. Miss Tarbell's fifth chapter of Standard Oil History treats of "The Price of Trust Building." Frank H. Spearman has a splendid character sketch of a remarkable man, John L. Whitman, jailor of the Cook county jail, Chicago. Fiction is plentiful and first-class. The number is well illustrated and a good one in every respect.

The 1903 edition of the Standard Medical Directory is now in active preparation with the aid, so the publishers state from actual computation, of nearly twenty-five thousand correspondents representing every state, province, county, city and town of any size in North America. The new volume will consist of about 1300 pages comprising complete directories respectively of the physicians of all North America, colleges, societies, hospitals, sanitariums, mineral springs, publications and in fact everything related to medicine. The new features (including an alphabetical index of physicians with postoffice addresses and rosters of practitioners of the specialties) will, it is stated, add about one-third to the volume of the work. G. P. Engelhard & Co., Chicago, are the publishers.

The March Lippincott's Magazine contains a new novel by the author of "Fruit Out of Season." This, Mary Moss's latest story, is called "Julian Meldohla," and Lippincott's is fortunate to secure it. There are nine short stories of pleasing variety and by many names well known in magazinedom: Cy Warman, Ella Middleton Tybout, Phoebe Lyde, Clara Elizabeth Ward, Jerome Case Bull, Henry Wysham Lanier, Edward Childs Carpenter, Clinton Dangerfield, A. H. Shirres. Mrs. Sara Yorke Stevenson writes on some present day abuses, interspersed with anecdotes. The title is "Intellectual Communism." Eben E. Rexford gives sound advice to cities as well as villages in his article entitled "Rural and Village Improvement Societies." No magazine of the month can make a better showing of verse than Lippincott's The "Walnuts and Wine" department follows the substantial feast, as it should, and the number closes hilariously.

THE DOCTORS' WORLD.

Therapeutic Briefs, Medical News Items, and Clinical Notes on Medicine and Surgery.

Medical College Statistics.—One hundred and fifty-six medical colleges, with 6,776 instructors, enrolled 27,501 students and graduated 5,002 students in the school year 1901-1902. The graduates 20 years ago were 4,115.

* * *

Physical Culture.—One of the fads of the day is physical culture and there is a whole lot of value to it. But its exponents, like a great many other faddists and one idea people, claim far too much for it. Persons who have not been thoroughly educated in the cause and cure of disease see a few cases improve and then think they can cure all the diseases of the flesh by their one therapeutic measure. Time shows their shortcomings and failure to keep their promises and then the fad disappears. Physical culture under the direction of an educated physician can be used as a therapeutic agent of value. We have often in these pages advocated the use of other therapeutic agents than drugs. We must use the drugs, but we should also use the other methods. A great amount of good can be accomplished by using massage, suggestion, electricity, hydrotherapy, physical culture, etc. The educated physician should use these methods and reap the benefits. It pays to get books on the subjects and be in a position to thoroughly understand them. Physical culture is carried to excess by many and, like cycling, we shall have ill results from its overuse. The editor of Health, London, Eng., sounds the following timely note of warning:

It takes a good deal of judgment to manage athletics and exercises of all kinds. More people do themselves harm by going to extremes in matters of this kind than the world is willing to admit. The difficulty is that half the time the victims of foolishness do not know what the matter is with them until the harm is done, and frequently are unaware of the cause of their sufferings. Physical culture has been lauded to the skies, and it is deemed impossible that there can be any wrong or harm in it. It is of the utmost importance that those who are beginning training of any sort should use the greatest care and deliberation in all that they do, and thus avoid injurious exercises and possible evil consequences that may never leave them. It seems but a little thing if one strains a muscle, but such an accident has caused a lifetime of misery. Any exertion that causes a straining of the muscles should be avoided. This is admitted by everyone; but no one seems to take into consideration the fact that the very worst overstraining can come from one's favorite exercises, or by means of a few simple movements that appear to involve but little tax on the strength. Not long ago a young woman applied to a physician for advice about a serious pain in her side. She had been suffering for some time, and it had increased in severity until it was almost incessant. It took some time for the doctor to get any clue to the cause of the trouble, but finally it appeared that she had been in the habit of taking certain gymnastic exercises with her hands on her hips, the fingers pressing forward over the sides. This at once furnished the key of the situation. The continual pressure of the finger tips in front of the hip bones had created an inflammation that became a rather difficult

thing to handle, and so for months she had suffered, and merely because no one had seemed to discover that the constant pressing on a sensitive spot might do a great deal of harm.

The Bacillus of Syphilis.—Bacteriologists have long been looking for the bacillus of syphilis and it now looks as though their efforts would be rewarded. Dr. Max Joseph and Dr. Piorkowski, of Berlin, are almost certain that they have identified the specific bacillus of syphilis. They conclude that the syphilitic virus is in the semen and in it much longer than in the other body secretions. This explains how a man may infect a woman long after all other syphilitic symptoms have disappeared. The bacillus they have isolated occurs in colonies. These bacilli are rod shaped, plump, for the most part thickened in a club shape at one end. Especially notab'e is their clear stockade-like arrangement.

The discovery of this bacillus is of great practical importance. If the announcement of these investigations is thoroughly proven the presence of syphilis can be accurately determined if all other signs are wanting. The important question as to the marriage of syphilitics can be safely and accurately answered. Also it will always be possible to know exactly whether or not the syphlitic has been entirely cured. All that will be necessary to determine these questions will be a microscopic examination of the semen.

Dr. Max Joseph gave a lecture on this subject at the last annual convention of German physicians and scientists. The Yale Medical Journal publishes a full translation of the lecture from which we take the following concluding paragraphs:

We believe we are able to lay before you two facts from which it would appear that these bacilli we have found are in fact of a specific nature, in the first place Piorkowski has succeeded by means of a special staining method in showing the presence of the bacilli in their typical stockade arrangement in the freshly ejected syphilitic semen, and in the second place we can demonstrate to you typically stockade-like arranged bacilli in sections of syphilitic lymph glands.

For the specific nature of these bacilli it was of course from the very start important for us to find under the microscope the same micro-organism in the semen of the syphilitics from which we got our pure cultures. We had not attained this result at the time of my paper before the Berlin Medical Association on March 5, 1902. We are glad now, however, to be able to announce to you that Piorkowski has now succeeded in showing very clearly the presence of these bacilli with the microscope by the following staining method. He usually proceeded thus: A smear was made by means of a coverglass as in making ordinary blood smears. This was then dried in the air, fixed and stained by weak carbol-fuchsin (20 drops Ziehl's carbol-fuchsin to 30 c. c. water) for ten or fifteen minutes in the flame. In such slides the bacilli were to be seen located near together in stockade arrangement, and now and then showing clubbed ends. Finally, gentlemen, we lay before you sections from a syphilitic inguinal gland which was excised from a man with typical symptoms of recent constitutional lues. Here again you will find the same bacilli arranged in typical stockade fashion. Besides these you will find also scattered bacilli of the same sort over the larger part of the gland and these show for the most part a distinct pole coloring—i. e., a light colored middle and dark colored ends. But much greater stress we would rather lay upon the stockade-like arrangement of the bacilli because in this

we see an essential characteristic of this class of bacilli.

To show up the bacilli in tissues after much hunting for all possible methods and for very different combinations of staining the Ziehl-Neelsen method has proven after all essentially the best. We put the thinnest possible paraffin sections in xylol for twenty-four hours, then into seventy per cent. and absolute alcohol On a slide the sections are dried off with blotting paper and for four hours put in diluted carbol-fuchsin (test tube half full of water and four drops of carbol-fuchsin). Then follows 3 per cent. acid alcohol, water, drying on slide with blotting paper, staining for some minutes with Loeffler's alkaline methylene blue solution, again washed, dried with blotting paper and mounted in Canada Balsam, avoided every trace of alcohol or xylol.

In the sections colored by this method the bacilli appeared not acid proof, and stained positive by Grams. In the preparations before you they appear as blue-colored formations. According to previous investigations these bacilli do not seem to be evenly spread in the lymph glands. The peripheral parts seem to be almost entirely destitute, while in the central parts of the gland the bacilli are usually found in very large numbers. They appear then in the lymph spaces between the cells and are sometimes present in large, sometimes small, numbers

Our studies on the occurrence of bacilli in the other lesions of lues are not yet concluded. We, however, hope soon to give you further information. At any rate it will not surprise you if in connection with our above mentioned investigations we lay great stress on the occurrence of the bacilli sections.

According to the well known demands of Koch, for the identification of specific bacteria, proof should be forthcoming that in all cases of the given disease which are accessible for investigation, the bacteria were present and that we were dealing with a constant and not accidental presence. They are to be present in no other disease. They shall represent something specific for the given disease. From our present investigations it seems that in fresh cases of syphilis the constant presence of bacilli has always been shown. We know no other disease for which these bacilli are specific.

So we hope that soon we can lay before you more facts which shall show that we actually are dealing here with the true cause of syphilis.

Chronic Otitis Media.—The successful use of superheated dry air in the treatment of obstinate joint affections suggested, about five years ago, to Dr. Geo. W. Hopkins, of Cleveland, Ohio, that this important therapeutic agency might be of value in the treatment of obstinate cases of chronic catarrhal otitis media which are characterized by ankylosis of the ossicles. Aurists in all parts of the country have since reported pleasing results from its use. Dr. Hopkins used a number of different hot air appliances in his work but not being entirely satisfactory he had a heater made by the Terry Heater Co., of Cleveland, which his experience demonstrated would be all that was desired. In an article on the use of superheated compressed air in the therapeutics of catarrhal otitis media in the Annals of Otology, Rhinology and Laryngology Dr. Hopkins has described this heater and reported his results with this therapy, we take the following from the article:

This heater has been made for me in three types, deriving their heat, respectively, from alcohol, gas and electricity, the choice of instruments depending upon convenience.

The heater in its various types derives its superiority from the fact that it heats compressed air and delivers it to the patient, under pressure, at the desired point only, and it cannot escape at any other point. The alcohol heater consists of a metal cone around the inside of which is wound a tapering coil of copper tubing. Beneath it is an alcohol lamp which heats the coil to a high temperature in a few minutes. Compressed air from a tank, pump or bulb enters the heating coil at the bottom, through rubber tubing, and leaves it at the top through a metallic tube having an eartip of vulcanized fiber, shaped similarly to an ear speculum. The delivering tube has two rotating joints which make it readily adaptable to any position of the patient, and the vulcanized fiber eartip does not become inconveniently hot, even when the hottest air is passing through it. This heater is far superior to those of the old type, but has a much smaller capacity than either the gas or electric heater of the new type.

The gas heater consists of a blue-flame heater over which is set a similar, but larger coil of copper tubing. The compressed air enters and leaves the coil in the same manner. It has a large capacity, is economical in cost of operation, and gives splendid results.

The electric heater is the ideal appliance of this ideal type. It takes the current from the 110-volt lighting circuit through an ordinary lighting-socket and plug, and can be used on either the direct or alternating current. It consists of an air-tight tube holding within it the wire heating-coil. A nickel-plated hood surrounds it, and the intervening space is packed with asbestos. The wires enter the tube at the bottom through a bushing, and as the tube is perfectly air-tight it serves the purpose of a coil of copper tubing and makes the latter unnecessary. Compressed air enters the tube at the bottom and leaves at the top in a manner similar to the other heaters of this type. Air passing through this appliance acquires its maximum temperature in eight minutes—a rate of elevation which is just about right—and the heater is an ideal one in every respect.

With either the gas or electric apparatus an enormous volume and degree of heat can be secured at will. The results secured by employing a heater of this type are incomparatively better than the good results secured from heaters of the old and crude type. Heaters of the new type have a direct, definite and positive action. They embody safety and convenience in every detail and yield certain and prompt results because the compressed air which they heat must escape, with more or less force, at the exact spot desired and cannot escape at any other point. So great is this advantage that compressed air heaters will perhaps ultimately entirely replace the old "natural draft" heaters.

Several seemingly peculiar facts must be borne in mind in employing compressed air heaters:

(1.) When the appliance becomes hot and exit is through a small opening, as in an ear tip, the temperature of the air is proportional to the rate of flow, or degree of air pressure. Strange as it may seem, the air temperature may be increased one hundred degrees by increasing the air pressure five lbs. or conversely, the temperature may be lowered by decreasing the pressure. This fact enables us to regulate the temperature at will by merely increasing or decreasing the volume of air entering the cylinder.

(2.) The air temperature drops very rapidly after the air leaves the exit-nozzle and in order to secure the maximum heat the part under treatment must be as near the nozzle as possible and still allow room for escape of the used air if a cavaty like the ear is under treatment.

As to the results which may be reasonably expected from the judicious and skillful employment of this agency with good appliances in cases of chronic catahrral otitis media, it may be said:

(1.) That as an exclusive treatment it is rarely of much value in bad cases.

(2.) That when indicated and judiciously employed, in conjunction with other measures of recognized value, it will give results which would be utterly impossible without its aid.

(3.) That when employed with care it is absolutely safe unless contraindicated.

(4.) That it is of little value in old subjects who have extensive labyrinthine involvement.

(5.) That it stimulates absorption of articular deposits, removes atrophy and relieves rigidity of the tensor tympani.

(6.) That it acts more favorably on the ossicular chain than on many other articulations, because of their exceptional proximity to the surface.

(7.) That arteriosclerosis, serous effusions into the tympanum and perforations of the tympanum are usually contraindications, and always contraindications to the inexperienced operator.

Technique: The ear selected for treatment is carefully examined and found to be perfectly clean and dry. A light pad of gauze (two thicknesses) is placed over the ear and with an ear speculum the gauze is pressed deeply into the canal. The ear-tip of the heater is then carried well into the canal, leaving only room enough between the tip and the tympanum for the escape of the used air.

The electricity is then turned on, or the gas ignited (as the case may be) and the compressed air is admitted to the cylinder under about five pounds pressure. It is well to give ten or fifteen minutes seance, increasing the temperature gradually until the limit of toleration is reached. The temperature steadily increases until the heater reaches its generating limit at that air pressure, and if the patient tolerates the temperature well it may be further increased by raising the air pressure to seven, eight or even ten pounds, in most cases. One cannot be guided by thermometers in giving these treatments and hence they are not employed on the new heater described. The only guide which can safely be followed is the individual toleration of the patient. But it is well to remember that the more slowly the temperature is raised the higher temperature the patient can endure without discomfort.

Treatments are best given three times a week for from three to twelve months.

Every case must be treated as a whole. He who neglects the appropriate treatment of the naso-pharynx is doomed to disappointment.

Antiseptic washes must be used. All abnormal conditions must be rationally treated. Constitutional measures, when indicated, must not be neglected. Inflation of the Eustachian tube with a warm, stimulating vapor from some good apparatus like the Globe nebulizer is usually imperative.

It is well to practice Eustachian inflation and vibratory massage of the middle ear with medicated vapor from the nebulizer after each hot air treatment, being particular that the vapor is warm. A warm vapor is easily secured by connecting the compressed air heater in service with the nebulizer, sending the compressed air first through the heater and then through the nebulizer.

Careful attention to all details brings most gratifying success in the form of gradually increasing and steadily improved hearing and gradual disappearance of tinnitus

A single detail neglected may cause absolute failure.

MODERN THERAPEUTICS

Brief original communications and short abstracts giving the latest in therapeutics.

SEPTICAEMIA.

By E. J. Melville, M. D., Bakersfield, Vermont.

Case 1. Feb. 6, 1894, was called to see Homer B., aged 14, who had been ill with a swelling in right groin for three weeks. Had been treated with hot applications, etc., but during that time abscess continued to grow, and at the time that I first saw him fluctuation could easily be made out. Temperature, 102.5°F.; pulse, 120; great emaciation; constant vomiting; daily chills followed by copious sweating, denoting pus absorption. Diagnosed appendicular abscess and advised operation. This was done same day under local anesthesia. Much pus escaped, and several small portions of fecal matter, denoting an opening into the gut. Temperature remained high, and sweats continued for three days following operation, indicating the presence of pus. I then began the use of Marchand's H_2O_2 medicinal, (15 vol.) so as to destroy the pus and morbid elements which were still there. I injected 4 oz. of H_2O_2 with a glass syringe slowly, while patient was in the Trendelenberg position, and allowed it to remain about fifteen minutes. The boy was then lowered and laid upon his right side, when large quantities of pus, broken down tissue and gas flowed from wound. By gentle compression and massage of abdomen, much more was obtained. Large quantities of sterilized gauze were packed over the opening in right side. The flushing out with H_2O_2, etc., was repeated every twelve hours. The improvement was prompt. Temperature reached normal, and remained so after 48 hours. Wound was now washed out with the H_2O_2 daily for four weeks, after which time the abdominal wound and faecal fistula were entirely healed. Patient has since developed into a full grown laboring man, and has had no hernia nor any outward symptoms of his severe illness.

Case 2. March 2, 1897, was called to see George T., aged 38 years, who had been in the care of a Christian Scientist for four weeks for a large swelling in right side. The treatment consisted in endeavoring to persuade the man that he was not ill, and insisting that he take active exercise. Found patient in recumbent position with knees flexed upon abdomen, and suffering intense pain over right side of abdomen, which was filled with a soft fluctuating mass. Temperature, 103.8°F.; pulse, 130. Opened abdomen under local anesthesia aud evacuated three quarts of foul smelling pus. Used 4 oz. H_2O_2 full strength, slightly warmed, after pus had ceased to flow, and repeated procedure every twelve hours. This caused cessation of all untoward symptoms for eight days, when chills and fever returned. Another swelling was then noticed in right lumbar region, which, upon opening, gave one quart of pus. Flushed this second abscess in same way. The temperature soon reached normal, and patient made an uneventful recovery with exception of swelling of inguinal glands in left groin, which yielded in three days to hot fomentations.

For conclusion I might say, that in the above cases I used no medicines internally, and nothing externally but clean linen, plain gauze and H_2O_2 (Marchand's). The operations per-

formed were simply opening abscesses, no drainage tubes, no flushing with salt solution or water, and no packing of abscesses. Though I used theH_2O_2 in large quantities, and made no especial effort to see that all the solution returned, and though it was used over a period of several weeks, no untoward symptoms developed from its use. The above gratifying results induced me to use hydrozone (which yields 30 times its own volume of nascent oxygen instead of 15 volumes) in other cases where a large amount of pus was present, with such good results that I am now giving the preference to this very strong solution.

COMMON SENSE TONIC MEDICATION, WITH ILLUSTRATIVE CASES.

By A. W. Duvall, M. D., Philadelphia, Pa.

(Continued from page 63, February Recorder)

Case 3.—Male, twenty nine years of age; bookkeeper; of spare build; had been closely confined to business. He had gradually lost flesh and strength for several months past, was particularly conscious of almost complete failure of appetite and suffered considerably from a frontal headache, which was subject to exacerbations of a neuralgic character. Eye strain was detected and corrected by a skilled oculist, but the headache persisted. Repeated physical examinations failed to reveal any organic disease except marked functional digestive disorders. Anorexia, distress after eating, indisposition to mental and physical exertion, epigastric tenderness and constipation were all present. The patient was first ordered comparative rest, a graduated diet and was placed on two drachm doses, t. i. d., of elixir of iron, quinine and strychnine. He failed, however, to improve under this treatment and was placed on Gray's glycerine tonic compound, tablespoonful in water, one hour before each meal time. He was ordered in addition an aperient draught at night. Within ten days his improvement was apparent to all his associates. With a marked increase in appetite there was a corresponding ability to digest food and the patient experienced a feeling of general improvement. At the end of one month's treatment he was discharged practically free from all subjective symptoms.

Case 3.—Female; twenty-four years of age; housewife, with exacting duties; had gradually lost flesh, strength and ability to take and digest food. She was nervous to a marked degree, had characteristic symptoms of atonic dyspepsia, was unable to sleep and presented a typical picture of nervous exhaustion. Oxaluria was present. She was ordered rest, freedom from household duties, light diet and Gray's glycerine compound, half ounce three times daily before meals.

The first change noted was an improvement in appetite and the ability to sleep. A modified "rest cure", with Gray's glycerine tonic compound, was continued seven weeks, at the end of which time all the symptoms of atonicity of the digestive functions had disappeared, her appetite was better than it had ever been, she was able to assimilate food, rested well at night, and was able to resume the care of her home.

Case 4.—J. S. F., male; thirty-six years of age. Family history: Mother and one brother died of pulmonary tuberculosis. Personal history good. Had not been sick in sixteen years; then had an attack of malaria. Present illness, November 27, 1900. Severe chill; pulse, 106; temperature, 101; respiration, 36. Great prostration and dry cough. For four days temperature 102 to 104, then gradu-

ally declined until on tenth day it was 100. Pulse ranged from 106 to 120, and then fell to 96. Other symptoms, as cough, expectoration, etc., characteristic of croupous pneumonia. But one point of importance is that there remained, after five weeks, a dullness in the apex of the left lung, which would not clear up. Examination of sputum showed the pneumococcus in decreasing numbers after two weeks, and in the fifth week were found tubercle bacilli. Patient had taken cod liver oil in conjunction with the usual remedies in the treatment of pneumonia; but he did not gain in strength. Gray's glycerine tonic was then administered. There was an immediate improvement in appetite, the patient began to eat and digest food in adequate quantities, coughed less, increased in flesh, strength and general nutrition. Dullness in left apex is practically gone, and sputum examinations show freedom from tubercle bacilli.

This case is doubly interesting. It illustrates not only the efficacy of the treatment practiced, but shows most forcibly that proper treatment in the early stages of pulmonary tuberculosis will frequently eradicate the disease; this latter fact is emphasized by all medical authorities.

Case 5.—Baby, seven months; bottle fed. Diagnosis: Bronchitis and malnutrition. Treatment: One-half teaspoonful Gray's glycerine tonic compound, clear, every hour. Seen two weeks later. Results: Bronchitis cured; gain in weight, 4½ pounds; general condition improved. Treatment continued for four weeks resulted in overcoming existing malnutrition.

Case 6.—Man, twenty-eight; mechanic. Diagnosis: Pulmonary tuberculosis, with poor appetite. General condieion very bad. Treatment: One teaspoonful Gray's glycerine tonlc compound every two hours. Ten days later: Cough diminished; appetite improved; eats with relish; fever much less. Treatment continued for six weeks, with the result that the night sweats were abolished and patient's nutrition is very much improved. Treatment continued.—Medical Examiner.

THE HEART IN TYPHOID AND MALARIAL FEVERS.

By Dr. S. Aug. Freund, Berlin, Germany.

Have I a case of fever? Then I do not lose sight of the enteric disorder; and yet with my thoughts upon that, I still remember that there is a heart that is liable, at any hour, to complicate matters. That heart calls for bromidia. It prevents the irritation, the poisoning. It cures the irritation, the poisoning. I can not dispense with it. How did I learn this? Partly by experiment, and partly by surgical experience. What do I mean by surgical experience? This: It is after the shock, after the operation may be, after the fever invades. What is that which we say? "All will go well, unless heart failure should ensue." We all know that expression. It is heard every day. But since I began to employ bromidia for the pain, this has been eliminated. I never dread "heart failure" when I administer bromidia in my surgical cases. This is tantamount to saying that I never dread and never fear it, as in all surgical cases, without an exception, I give bromidia. Having had such results there should be no need to ask where the principal lesson was learned in this matter of the fevers. I would not treat a surgical case and omit bromidia. I would not treat typhoid or typho-malarial fever, and omit bromidia.—Extract from article in Medical Brief.

IS THIS WOLF-WOLF?

For years the medical journals have been trying to convince the practitioner of the widespread evil of substitution and adulteration in drugs. But the profession has turned a half credulous, half indifferent ear, as if bored at the familiar sound of "Beware of Substitution," and "None genuine without this mark." They have in some instances hinted that it was necessary for the journals to support their advertisers: and have firmly believed that the adulterations were confined to proprietary medicines put up in labeled bottles and taken at the public's risk.

How many physicians make a practice of going behind the scenes and watching the preparation of a prescription, and how many, if they did so, would be able to tell by the form in which the crude drugs were handled whether they came originally from reputable sources, or whether they were bought by the honest but mislead druggist, from middlemen who successfully adulterated their wares?

From the laboratories where the exact potency of an absolutely pure drug is determined for endorsement in the U. S. Pharmacopœia, to the druggist's counter where supposably the same potency is being handed out on a physician's carefully written prescription there is often so wide a variation that one wonders whether it would not be safer for us to go back to the days of herbs and simples, and to cull and brew our own remedies.

At last the health department of New York has brought to the attention of the medical profession through the daily press, a forcible reminder of the widespread practice of substitution and of the adulteration of drugs. The medical profession has for years been thwarted in the greatest emergencies by the false values of the remedies furnished to their patients in their prescriptions. But the public has treated them with that tolerant, easy-going air of good-natured understanding, as though one should say, "It is hard to see another man getting one's profits," and has given the warning no more thought than would be bestowed upon a patent medicine vender's earnest plea to "Take no other," and "Beware of substitutions."

Commissioner Lederle has set in operation a wholesale examination of the stuff that is commonly sold as phenacetin. His physicians and staff have purchased phenacetin powders from 373 drug stores in Manhattan and Brooklyn. The official report gives the names of all, and includes many well-known drug stores, and department stores. Among these samples only 58 were found to be pure phenacetin, while the greater number, 315, were adulterated. The chief adulterant was found to be acetanilid, selected undoubtedly because of its cheapness, and its similar effects, in part, to phenacetin.

In the sale of an ordinary ten-grain pure phenacetin powder, the druggist makes a little over 200 per cent. He buys the phenacetin at $1.00 per ounce and retails it in small quantities at $3.20 per ounce. If his adulterant be acetanilid it is bought at the rate of 2½ cents an ounce, leaving him his sales almost clear. This mean and petty money traffic need not, however, be laid at the door of the retail druggist alone. It is important to lay the blame, however, where it is due, for the question is one with a double moral issue. The physician does not trouble himself about the druggist's profits or his sense of honor in dollars and cents; but he has his patient's health in his hands, and when he finds, if he ever does learn, that a cheap heart depressant such as acetanilid given in his prescriptions instead of the drug on whose certain action he is depending, he is justified in his honest indignation.

This is by no means a single instance. Nearly every drug in the Pharmacopœia is adulterated, and as such fails to give the desired action. So great has this evil become that we often confess to one another that we prescribe less and less, and confine ourselves to a few fundamental drugs, remedies which we think we obtain from reliable sources and give in cases of necessity, leaving our patients to take their favorite compounds of tonics and appetizers on their own responsibility. If drugs could be treated sacredly, exactly and conscientiously by the druggists, and by the public, as they are in hospitals, in experimental laboratories, and as physicians themselves treat them, the practice of medicine would be a much more satisfactory profession than it is at present.

We trust that in this particular case the New York Board of Health, which does nothing by halves, will trace this scandal to its source, and further, we hope, that physicians and druggists will prove as energetic as are the manufacturers of cereals and baking powders in establishing pure food laws, and will bring the enactment about pure drug laws, that will at least serve as a warning to offenders, and a caution and protection to the trusting prescribers and buyers of drugs.—Editorial in Medical News.

PNEUMONIA.

How does antiphlogistine abort pneumonia, and further, how does antiphlogistine resolve pneumonic consolidation? These queries are very often made by acute observers who have attended case after case of pneumonia with favorable termination under the influence of antiphiogistine.

The action of antiphlogistine is dependent upon well defined physiological laws—that a most important reflex association exists between the vessels of the skin and the underlying tissue—that, when the superficial blood vessels dilate, the deep seated ones contract. Continuous stimulation of the cutaneous reflex maintains continued relief by persistent contraction of vessels in the inflamed area of lung tissue. Such governing action prohibits extension of the products of inflammation through infiltration by effecting rapid absorption and elimination of toxines. The infected area becomes self-limited as the adjacent blood vessels supply well areated blood to compensate for the surcharged venous blood due to pulmonic consolidation. Under reflex control antiphlogistine resolves hepatization of lung tissue and through osmosis and dialysis assists the superficial blood vessels and lymph spaces to drain the hyperaemic parts by direct capillarity. Lessened blood pressure prevents administration of whipping medication to the overburdened heart.

QUICK, SURE AND TIME TRIED.

No doubt many of our doctor friends will recognize in the following, from Chas. B. Forsyth, M. D., (Bellevue Hospital Medical College, New York city), dated Alexandria Bay, N. Y., January 6th, 1903, an expression which will, in many instances, recall their own experience. He says: "I can say no more than that I have used antikamnia tablets since I began practicing medicine. Several times I have switched to other preparations, but I invariably come back to antikamnia tablets, when I want quick, sure results."

The Antikamnia Chemical Company, St. Louis, Mo., is an old and responsible concern, and any of their medicinal specialties may be depended upon to be just as represented. The latest additions to their list of preparations are "Antikamnia and Heroin Tablets" and "Laxative Antikamnia and Quinine Tablets". Send to them for free samples, mentioning Wisconsin Medical Recorder.

BRIEF MENTION.

Are you using triacol? If not it will pay you to send to the Alpers Chemical Co., New York, for free sample and literature. It is a valuable remedy.

James J. Hill, the multi-millionaire railroad president, gives the following seven secrets of success in life: Be honest, be earnest, be confident, be alert, be truthful, be early, study causes.

Sharp instruments are very necessary for good surgery. The dry hone made by E. A. Harrington, Waukesha, Wis , is very useful to the surgeon, as with it he can always have sharp instruments.

An antiseptic toothpick is the latest in antiseptic appliances. It is a quill toothpick filled with an antiseptic solution. By pressure on the plunger a little of the fluid is forced through a feed on to the point of the quill.

Helmitol is a new urinary antiseptic made by the action of formaldehyde on citric acid. It is of value in acute and chronic cystitis, posterior urethritis, prostatitis and pyelitis. The dose is 10 to 15 grains, three times a day in water.

I have found zematol all that is claimed for it and more. My success in treating skin diseases with this wonderful remedy has been phenomenal and I shall use it regularly henceforth in my practice.—Dr. W. P. Hough, Columbia, La.

Phenadul has given me very satisfactory results in the treatment of pruritus vulvae, eczema, erysipelas, varicose ulcers, etc., etc. Presented in the proportion of one drachm to the ounce of lanolin it makes one of the most soothing ointments I have ever used.—Thos. E. Cunningham, M. D., Cambridge, Mass.

Prof. Charteris, of Glasgow, was firmly convinced as a result of his wide experience that there were very few cases of night sweats of tuberculosis that were not either greatly ameliorated or entirely abolished by the persistent use of the hypophosphites. With its supporting action upon the general system whereby the causative exhaustion is antagonized and by the specific value of its contained strychnine and the mixed hypophosphites, Fellows' syrup of hypophosphites is effective in combating night sweats.

Prepared by the Rio Chemical Co., New York, S. H. Kennedy's extract of pinus canadensis is obtained from the hemlock spruce, an indigenous tree of considerable height, and having a coarse, heavy bark; the bark, moreover, is highly astringent, containing, as it does, both tannic and gallic acids, besides an oleo-resin juice which is constantly oozing from it. To use an expression freely employed by those who have given pinus canadensis a trial, "it acts like a charm on mucous surfaces." It therefore possesses properties which gives it a prominent rank in the treatment of an important class of maladies. Imparting tone and vigor to exhausted and relaxed mucous membranes, it exercises a most powerful influence over the various catarrhal affections; hence in nasal catarrh alone, its value as a therapeutic agent can not well be overrated. Its almost phenomenal success in gonorrhea, vaginitis, and all granular and inflammatory conditions of the male and female genitals, gives it a priceless value to the specialist.

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LEADING ORIGINAL ARTICLES.

FISTULA IN ANO.

By Charles C. Miller, M. D., 100 State Street, Chicago.

The subcuticular fistula is the one most commonly seen by practitioners. It is fortunately the simplest form of this affection. It is the result of a marginal abscess in the great majority of cases.

The patient may consult with the diagnosis of fistula already made, or he may be ignorant as to the character of rectal trouble from which he is suffering.

An inspection of the cutaneous surface in the neighborhood of the anus may reveal the orifice of the fistula. This opening may be fairly large, and surrounded by a bluish red skin. In other cases the tissues are quite healthy to its very margin, while in others still, we will note a few exuberant granulations.

Sometimes the opening is some distance from the rectal orifice, and at other times it is so close to the anus, as to be hidden in one of the radiating folds of the anus.

These fistulae run through the cellular tissue beneath the skin, and are usually complete, that is, they have an opening higher up within the lumen of the bowel. The internal opening varies as to its location. In some it is well within the sphincter, or rather above; in most of the cases it opens upon the sphincter, while in a few other cases both openings are external to the sphincter. The internal opening varies as to its size and condition just as does the external. In some cases it is easily found by the examining finger, either owing to its size or the alteration of the tissues around it.

In some cases there is a considerable induration of the margins of the internal opening, while in others there will be a small projecting nodule of altered tissues. This may be either of granulation tissues or the projection of a tag due to irritation and infiltration of surrounding skin. More or less of a discharge is always present from a fistula. It may be purulent, serous or more or less hemorrhagic in its nature. Its diverse character, owing to possible reinfection of the fistula at any time renders it unimportant in judging as to the nature of the fistula.

The exploration of a fistula with a probe is of secondary importance unless it is intended to treat the condition by means other than incision under a general anesthetic.

If we have decided from our ex-

amination that the tract is of sufficient length or depth to demand a general anesthetic, then we need not explore it, as we can treat it just as intelligently after the anesthetic is administered, even if we have not probed it.

The depth and direction of the fistula are alone revealed by the probe. It is impossible to ascertain by its use whether the fistula has one or more tracts. If the probe by manipulation be caused to take several different courses in the probing it is apparent that there exists more than one tract, if firm, intervening tissues be felt, but it is impossible to say that a single tract exists merely because the probe does not find more than one. Circumstances may prevent the probe entering an existing branch of the fistula.

If induration cannot be felt along the probable course of the tract the passage of the probe will make it possible to trace the course of the tract, and also estimate the depth of the tract by palpation of the parts upon it.

If an operation with a local anesthetic is contemplated the course and depth of the fistula should be known, and also the site of the internal opening. In rare instance the injection of colored fluids may aid in the search for an elusive internal opening. A good speculum is introduced previous to the injection.

If we find a very short tract just beneath the derm. at the verge of the anus, and it is easy to get the short strip of tissues upon a director, in a second's time they can be divided by a sharp bistoury passed along the groove. This will be the most expeditious way of disposing of such a condition.

As a means of rendering the tissues included upon the director insensitive to pain, freezing can be resorted to. For this the highly volatile sprays may be used. For the smallest lesions the injection of cocaine is hardly called for, as it will be fully as painful to cocainize, as it will be to do the operation.

After the tissues have been cut through, with the finger the floor of tract is to be explored. If it is found hard and infiltrated, the knife is carried along the floor of the tract dividing the tissues so affected.

Where there is an accumulation of unhealthy tissue products lining the tract, these may be scraped away. This can be done with a regular curette, or the operator can merely turn his knife, and scrape with its back. After this the remaining tissues, if not normal, may be painted with a strong antiseptic solution. Pure carbolic acid can be used upon a swab, and after a moment or two this can be neutralized with alcohol.

Hemorrhage is nearly always so slight in these minor forms of fistula as to call for no attention. If it is persistent the parts can be packed and pressure brought to bear upon the parts by a firm bandage.

After operation an antiseptic dusting powder can be dusted into the wound, and then a strip of gauze placed in the wound, and held in place by a pad of cotton, and a bandage completes the dressing. As soon as soiled the dressing is to be changed.

Before redressing the parts should be cleansed with an antiseptic solution, and the wound examined to see that union is not glueing the parts together over an unobliterated portion of the tract. The great object is to get healing from the bottom.

Where it is thought necessary from a somewhat greater length of the tract to render the parts less sensitive, the weak solutions of cocaine can be resorted to. For these parts a one to five hundred solution can be injected. For the injection of the solution a plain hypodermic will answer, though a larger syringe holding a couple of drams is more convenient. The needle need not be long, as multiple

punctures are not painful, if the punctures following the first are made through previously infiltrated areas.

A word about infiltration: See that the parts are really infiltrated, and that the solution is not merely deposited in a cellular interspace over the fistulous tract. Carry the needle, if possible, through the layers of the skin, then through the tissues immediately beneath this infiltrated area, continuing until infiltrated to the fistula. These words apply to fistulae which are even more than subcuticular. The parts are to be tensely distended with the infiltrating solution. A weak solution of the cocaine may be injected into the tract of the fistula if desired.

Having infiltrated, a director is to be passed into the fistula, and caused to traverse its length, and emerge through the internal opening into the bowel. Now the finger is to be passed into the bowel and hooked over the director and its extremity, if possible, withdrawn from the anus. In this way the parts to be divided are easily accessible to the operator.

The operation is commenced by laying open the fistula. This is accomplished by passing a sharp knife along the groove of the director. In operating under local anesthesia it is important to have all cutting instruments very sharp. This is due to the fact that the operator can never tell when the patient is going to make a sudden movement. If instruments are very sharp the operator can work by quick, certain strokes, and in doing the work the knife is wielded in such a way that the patient will jump away from the instrument rather than into it. Then the patient is much less conscious of the work being done, where the parts separate before a keen cutting edge.

In my own work, whether the anesthetic be general or local, knives and scissors must be sharp. For keeping knives in the best condition the instrument maker cannot be relied upon. The surgeon must learn to put a keen edge upon a blade himself. For doing this the ordinary razor stone will prove entirely satisfactory. The instrument should be finished upon the strop and a smooth razor edge secured. With a sharp knife the operator can work with greater accuracy and ease.

When the fistula has been laid open the cavity or tract should be examined. If it is found to be a narrow tract the operator can content himself with curetting away unhealthy tissue or can attempt to dissect out the pseudo-membrane, which not infrequently lines such a tract.

In not a few, it will be found that the fistula consists of quite a cavity, and that the incision has markedly overhanging flaps. If such are present, they are to be trimmed away so that they no longer overhang. The importance of this is twofold. First, they may reunite, leaving the fistulous tract still unobliterated as a result; and second, they may act as mechanical irritants, preventing healing from below.

Hemorrhage usually calls for little attention in this class of cases. Hot water may be used to check the general bleeding. The temperature should be as hot as the hand can bear.

Spurting vessels can be clamped, twisted or tied. A hemostat closed on a bleeding point will check the flow. Torsion may be used. For accomplishing this a hemostat or a regular torsion forceps may be used. Tying can be done by drawing out the tissues in the forceps or the old method of drawing out the tissues with a tenaculum may prove of service.

Where the curette alone has been used to remove unhealthy tissue from the bottom of the wound, carbolic acid can be painted over the surface remaining, and this after a moment can be neutralized by alcohol before the dressings are applied.

Before the use of the carbolic, it is

well always to draw the knife along the floor of the wound, so that it cuts through the unhealthy, infiltrated tissues. This is a procedure, which often has much to do with the success of the operation.

Dressings are to be applied so as to secure or insure healing from the bottom of the wound. This is accomplished by packing the wound with sterile or antiseptic gauze.

During the first few days iodoform gauze is usually the agent, which I use as a dressing. After this plain sterile gauze is just as satisfactory to the surgeon, and much more so to the patient.

Infection is not likely to occur after the formation of granulations. This occurs by the third day.

The dressings over the gauze will consist of a large pad of cotton held in place with a T bandage. If oozing persists after the operation considerable pressure can be exerted to check it by placing the bandage tighter than otherwise.

As soon as soiled the dressing should be changed. Before reapplying the succeeding dressing the parts should be washed with an antiseptic solution.

Before operation the bowels should have been thoroughly moved. After operation if the wound is soiled by the passage of feces in every instance the wound should again be thoroughly cleansed and a clean dressing applied.

The patient is allowed to be up and about very shortly after these minor operations. In fact it will probably be found, that it is most convenient to do this work in the office. The patient is cautioned not to be about too much and over exert himself, but careful exposure to fresh air and sunlight in suitable weather will really facilitate healing.

After the third day, the dressing of the wound can be left to the patient. The secretions are to be washed away with warm water to which has been added a small quantity of carbolic acid, after which a plain sterile dressing is to be applied. The gauze sometimes shows a tendency to adhere to the surface of the wound, owing to the projection of the granulations through its meshes. In such a case sterile cotton can be substituted to an advantage. The cotton if it adheres from a drying of the secretions can be removed by the use of warm water. When thoroughly saturated it will separate without pain to the patient.

The operator is frequently to inspect the wound to see that the healing is from the bottom. The cavity formed by the operation will fill with granulations and then the process of healing is completed by the outgrowth of epthelial cells from the edges until the entire surface is covered.

I have thus considered at some length decidedly minor conditions. It is for the reader to remember that they are met with frequently, and that considerable discomfort is produced by these forms of fistula. Not only this but progress or even a minor lesion may result in considerable harm. To say the least a cure will be highly appreciated by the possessor of one of these lesions, and a careful practitioner after giving due attention to the subject should be able to offer and secure a cure for these patients. He adds not only to his prestige but his income as well by so doing.

* * *

Sodium nitrite is a remedy which some practitioners have used extensively, during the last few years, with pleasing results. Its action is similar to nitroglycerin but of longer duration. It is useful in the treatment of epilepsy, asthma, angina pectoris and attacks of dyspnea. It acts efficiently as diuretic, especially if taken with considerable water. The dose is from one-half to three grains. It is very conveniently administered in tablet form.

LAGRIPPE.

By W. E. Nichols, M. D., Secretary of the Board of Health, Andrews, Indiana.

Lagrippe has been in this part of the country during the past winter one of the most common and formidable diseases that we have to contend with. Every epidemic of this disease has its peculiarities; that is, it puts a certain face foremost, or a certain symptom is predominant, in fact, this idea might be individualized, so that we could say that every case has its own peculiar symptoms.

The usual manifestation is a sudden beginning, that is persons who were well in the morning, will send for you by evening. You will find the temperature 100° to 103°, eyes red and watery, catarrh of the nose and throat, marked in many cases, chilly sensation, a general soreness of the surface, severe neuralgic pains all over body but particularly in the back and limbs and "all the bones aching awfully" as the patients say. There is a peculiar laryngeal cough, worse at night, which makes the trouble totally different from an ordinary cold. I have an idea that lagrippe sufferers need more medication after than during the acute stage of the disease. There is great damage done to some of the great nerve centres, to those of circulation and nutrition, and the heart's action is peculiar and needs watching.

This disease illustrates to me the great necessity of a careful and intelligent treatment continued for some time after an apparent recovery.

COMPLICATION AND SEQUELAE.

In the adult the most frequent complications are; pneumonia, pleurisy, bronchitis and a sub-acute form of gastritis with obstinate constipation and torpidity of the liver. In children I believe the most frequent complications are; broncho-pneumonia, bronchitis and otitis. Pericarditis, endocarditis and a peculiar irregularity of the hearts action, without either, and without apparent cause, other than nervous phenomena, are occasionally met with.

Intercostal neuralgia, lumbago, and sciatica are not infrequent complications.

There is often a prostration following grippe, which leaves a person weak and unfitted for business or labor for days, and sometimes even weeks, after all other symptoms have subsided.

A peculiar feature about this is that the prostration is out of all proportion to the attack of the disease. I have had patients in whom the onset of the disease was very mild, and yet they would remain weak and no account for days, bordering on nervous prostration.

There is another important fact to which I wish to call especial attention, and that is the tendency of grippe to develop old chronic troubles, though dormant at the time, especially is this so with rheumatism, neuralgia and Bright's disease.

Just a few words about treatment. Each case must be studied and treated according to the symptoms. The suffering of the patient is sometimes so great that all remedies fail to give relief until a hypodermic of morphine is given. My favorite treatment in a great majority of cases is a chocolate coated tablet of the following:

℞ Acetanilid, gr.ij
Salicylate soda, gr.ij
Quinine, gr.j
Aloin, gr.$\frac{1}{10}$
Podophyllin, gr.$\frac{1}{20}$
Tr. capsicum, mj

Give one every 3 hours until bowels become free. Generally follow with 2 gr tablets of quinine sulphate; 4 or 5 times a day for a week.

PRACTICAL HINTS.

By Dr. J. A. Burnett, Brawley, Ark.

Fowler's solution given in two drop doses three times a day will remove warts.

The sulphate of iron generally gives better results in anemia than any other salt of iron.

Most all cases of urinary incontinence can be cured by a combination of boric acid and salol.

A strong infusion of equal parts of yarrow and sumach berries injected into the rectum will cure hemorrhoids.

Salix nigra will often control excessive sexual desire, but it is claimed that its excessive use will emasculate a man.

The best local treatment for tonsilitis is the tincture chloride of iron applied in either full strength or diluted with water.

For vomiting of pregnancy good results are obtained with five drop doses of tincture of iodine given in a tablespoonful water.

Fresh mullin oil made from mullin blooms will, when applied to warts, remove them, and when given internally will cure most cases of bed wetting in children.

Grindelia squarrosa is the most valuable remedy in the materia medica in chronic malaria, headache of malarial origin, enlarged spleen and as a tonic following malarial attacks.

For swelled testicles following mumps apply to the scrotum a thick paste of subnitrate of bismuth and water, which is cooling and soothing and will soon reduce the swelling. Give a morning laxative of epsom salts for a few mornings.

Stellaria media—chickweed—is of much value when used as a poultice to inflamed or weak eyes, bruises and other superficial inflammations; also a handful bound to the back of the neck before retiring is conducive to sound and refreshing sleep.

Equal parts of the tinctures of cimicifuga and gelsemium given in one to three drop doses every hour will bring on the menstrual flow when delayed by passive congestion, cold, grief or other similar causes and acts similarly on the lochial discharge after parturition.

Howe's acid solution of iron improves the appetite, promotes digestion and can be used when an alterative is indicated and a tonic effect is desired. It is made as follows: Dissolve two parts by weight of sulphate of iron in one part of nitric acid and ten parts of water. Filter and give two to four drops in a tablespoonful of water every three or four hours.

SUGGESTIONS.

By M. G. Price, A. B., M. D., La Follette, Tenn.

Aconite is a wonderful drug and is helpful in more maladies than perhaps any other remedy. In the onset of diphtheria it is very useful. In the inflammatory diseases of the throat its influence is notable on account of its local as well as constitutional effects. Small doses will often abort croup.

If you want to receive the everlasting benediction of womankind make yourself proficient in treating mastitis. Learn to diagnose it readily and get in your well directed blows before it gets the start of you. It is usually of infectious origin and has for its distinctive symptomatology, fever, which may be ushered in by a chill and rapid pulse, swollen and painful breasts, skin red

and brawny. The most distinctive sign of suppuration is a dusky hue of the skin and edema. Specific treatment may be begun at once by administering a full dose of aconite with 10 drops of tincture of phytolacca, alternating in hourly dosage with tincture aconite and 10 grains of potassium acetate. A few doses will give you fine results.

Have you never observed chilliness after labor? Did you know what it was? It is surgical shock. Give the woman $\frac{1}{30}$ grain of strychnine in the beginning of labor; it helps her on with that work and will prevent the rigor. We have never noticed these rigors where we have used this alkaloid.

Heat is evidently the cause of summer diseases in children. Remedy—cold. Heat causes depression and enervation of the physical organization. Brucine is the remedy. Heat causes deleterious changes in food and drink. Look well to the food and water supply and use intestinal antiseptics. Copper arsenite is fine. Zinc sulphocarbolate is excellent.

Clinically it is almost impossible to differentiate diphtheria from many other throat affections. Results of 860 cases in which a bacteriological examination was made show that local treatment avails nothing, but does harm and has been abandoned. Pilocarpin is a precious auxiliary less dangerous for children than adults. It is specific in one-fourth of a syringeful of a 2 per cent. solution; better $\frac{1}{67}$ grain hypodermically until effect.

In some people quinine is positively contraindicted. In such cases nuclein and mercury biniodide is an excellent substitute. This treatment can be used in all conditions where quinine is usually used.

SCIENTIFIC VIEW OF MEDICAL POISONS.

By J. L. Wolfe, M. D., Cedar Falls, Iowa.

When by chemical analysis the expert has determined the presence of poisons, either in the cadaver or the contents ejected, he is required to declare whether the quantity of poison found or the quantity swallowed, is sufficient to produce death or cause the symptoms observed. In order to establish the sense in which the expert should reply to this question, we may take a hasty survey of the data upon which he should rely.

1. The whole quantity of poisonous substance which has been swallowed is not absorbed, except in exceptional cases. A portion is usually rejected by vomiting, or after passing the alimentary canal passes off at stool. When death takes place immediately a portion may still be found in the canal and the remainder absorbed or carried through the different tissues of the body.

2. The portion absorbed is not distributed uniformly through the various parts of the organism. Frequent experience shows that with the same weights the liver always yields to analysis a much larger proportion of poison than all the other organs.

3. Elimination commences a short time after absorption, and investigations which have been made up to the present time, show that as regards certain kinds of poisons, it may be completed in fifteen or twenty days after ingestion. It is, therefore, evident that the amount of poison remaining in the organs when it has been absorbed, continues to diminish from the period of its ingestion. So that if death be deferred a sufficient length of time, the entire quantity of poison absorbed may have become eliminated prior to death.

Thus, a month after the ingestion of arsenical poison, the organs will contain no trace of arsenic. Chemical search may not find it, yet death may result from the disturbance which it caused.

It is obvious that the presence of the poisonous substance in the organism until the last moment, is not necessary for the production of death. The cause is effected at an early period; diseased action had become developed under the influences of the poison, and death is the termination of the disease.

4. When rejected matter is not given to the expert, and when the alimentary canal is entirely empty, chemical research can only be directed to certain organs or portions of them. It is a rule for the first expert to retain a portion of the rejected substance given him for ulterior research. It is then comparatively easy to understand, that as more or less loss being unavoidably sustained in so difficult an analysis, that the quantity found constitutes but a very small fraction of that which has been swallowed, or even of that which been absorbed.

5. It is important to note, that for no poison do we know the exact quantity sufficient to induce fatal poisoning. By observation we know the limit beyond which a dose should in general be regarded as fatal, but this limit is superior to the reality. Thus, we know that fifty centigrammes of arsenic will induce poisoning, except in very rare cases. But no one can decide in a given instance, whether ten or fifteen centigrammes will not suffice to cause death.

The action of poisons is so variable, and we are so little acquainted with the cause of their variances, that we cannot, without the risk of exposing ourselves to serious error, determine what is the minimum dose of poison sufficient in a particular case to cause death, or cause the symptoms observed.

When a poison exists in any part of the system, quantity cannot be depended upon as a proof of poisoning, except in special cases. The greater number of fatalties of this kind would escape detection if such proof was arrived at in all cases. An instant's reflexion will suffice to explain, that except in the case wherein poison has been found in any part of the alimentary canal, the ejection in quantities much larger than the highest therapeutic doses, the consideration of quantity will in no wise explain the problem.

IRRITATIONS OF THE RESPIRATORY MUCOUS MEMBRANE.

By Edw. C. Rothrock, M. D., Philadelphia, Pa.

(Continued from March issue of Recorder.)

In respiratory diseases such food should be used as judgment and experience would dictate and of course, food to suit the taste of the patient. Water or water acidulated, lemonade, should be allowed and is very pleasant and of benefit to the patient. Food should be given in small quantities and at short intervals every two or three hours as required to maintain the vital powers. If food is given in excess it will do harm, distress the patient by fermentation and flatulent distention of the stomach and bowels and impede the already embarrassed respiration and when the blood is surcharged with nutritive material a further burden will be placed upon the lungs in the effort for its assimilation. No food or drug should be used that would irritate, nauseate the stomach and interfere with the appetite, digestion and assimilation, for the vital forces must be maintained, an excess of food avoided and care taken as to

its quality. Depressing drugs have often in children caused untoward effects as they are very susceptible to such action. In some cases respiration becomes greatly embarrassed, circulation fails, which is evident by rapid and labored breathing, and cyanosis is present, caused by carbon dioxide. The high temperature and inflammatory action increase more and more, embarrassing the respiratory organs and the functions of the heart. Great strain is put upon the lungs and heart which already are doing double duty. The blood not being properly oxidized in the lungs a failure of the respiration is evident and untoward effects will take place without relief. A failure of respiration is more to be dreaded in children than heart failure. Stasis of the lungs must be prevented by stimulating the heart, drawing the blood into the arteries as much as possible from the veins and thus relieve to some extent the engorged venous system and the obstructed pulmonary organs. Alcohol, undoubtedly is the best stimulant, particularly for children and is preferable to others. A child of one or two years of age can have ten to twenty drops of whiskey, diluted with water and sugar added; a little nutmeg will be of advantage; this given every two or three hours, of course, to be increased or diminished according to the urgency of the case. If great prostration or septic condition alcohol is of the greatest benefit, in maintaining the tonicity of the heart, hence, sustaining the vital forces. Alcoholic stimulants should not be given in doses over 1 to 2 ounces in three or four hours as over the amount two ounces, will not be oxidized and will perhaps do harm in children. The dose of whiskey would be from 5 to 20 drops used according to age and condition existing. In simple attacks alcohol should be used, if at all, with caution and cases will occur when it will not be needed. A saturated tincture of camphor ½ to 2 drops for children, adults from 2 to 5 drops every one or two hours in depression is a valuable stimulant. Caffeine often has a good effect, dose for children $\frac{1}{16}$ to $\frac{1}{8}$ grain, adults 1 to 5 grains. Caffeine in small doses stimulates the heart, quickens its action, raises blood pressure, stimulates cerebral functions, is a diuretic by stimulating the secreting apparatus of the kidneys. Large doses have a different effect, depressing the heart and respiration, pulse becomes small, irregular and intermittent. Larger doses paralyze the cardiac muscle and its motor ganglia and death is by paralysis of respiration. As a stimulant I prefer alcohol and particularly for children. Next to alcohol, the nitrites, nitrite sodium, nitroglycerin in small doses. Glonoin is the best and most lasting in its effects. They produce great vascular dilatation and hence lowering blood pressure by paralyzing the vaso motor centre, empty the veins into the arteries as it were and relieve the right side of the heart and therefore the engorged condition of the lungs. A child one or two years old could take of nitroglycerin $\frac{1}{200}$ to $\frac{1}{250}$ grain every two hours or every three hours as indicated. Nitrite sodium is used in doses of ½ or 1 grain to 5 grains, children ⅛ to ½ grain. Nitroglycerin in large doses produces tumultuous action of the heart by relaxation of its inhibitory apparatus, and impairment of the ozonizing function of the blood. Therefore it should be given in very small doses. I prefer nitroglycerin to digitalis or strophanthus as the two last produce blood pressure. A good stimulant to the heart and respiratory functions is sulphate strychnine $\frac{1}{400}$ to $\frac{1}{500}$ can be given to children every two, three or four hours. It stimulates the nervous system, produces blood pressure in small doses but in larger doses it lowers blood pressure as tolerance is had.

Rundschau.

By H. Speier, M. D., Rochester, Minn.

FORMALIN INJECTIONS IN SEPTICEMIA.

The Rundschau reported in a previous number two cases of septicemia treated successfully by subcutaneous injections of a weak solution of formalin. While speculating on the effect the new method would have on therapeutics, if found reliable, we warned our readers against becoming too enthusiastic after the manner of the newspaper scientist. The history of medicine presents a long array of meteoric appearances, dazzling for a brief time, soon to be forgotten. As predicted, the process is being tested severely, and at present appears much less promising. The Medical Record, in a careful analysis of the original case, that of Dr. Barrows, points out possible errors in the reasoning, that the good results reported may have been due to other means of treatment employed and have been known to follow other methods in apparently desperate cases. In one case an injection of only 100 c. c. of a solution of formalin 1-2500 instead of 1-5000 made by mistake caused very serious collapse with cyanosis, symptoms due to poisonous action on the red blood cells. It shows that the margin of safety is very narrow and extreme caution necessary. Experiments made in the bacteriological laboratory of the health department of New York City on rabbits gave no encouraging results. In fact death was hastened by the formalin injection. The formaldehyde combines with the albuminous part of both the bacteria and the blood and is consequently injurious to both. While the bacteria recover and become reproductive, the blood cells do so in a less degree. Still, the experiments are not complete and far from being conclusive. Much more evidence, especially clinical, is needed. As the Record explains, less is to be expected from a germicide, an agent capable of destroying bacteria in the body without injuring cells, than from an antitoxoid an agent able to overcome the poisonous effects of the toxins which may remain after the death of their parent germ. The physician would be rash, who should resort to formalin injections without extreme caution.

HEALTH FOODS.

A new fad has struck the American people and has struck it hard, viz. the consumption of prepared, patent or so-called health foods. Two cities are particularly prominent in the productions of the stuffs, Minneapolis and Battle Creek. They are being lavishly advertised in newspapers and monthly magazines, on billboards, by elaborate window displays and free exhibitions. Physicians, inquiring into the diet of their patients, meet constantly the statement that they eat this, that or the other health food. The claims made for them by the manufacturers are extravagent. Each one is extolled as the ideal nutrient, predigested, hence especially suited to the dyspeptic, containing particularly ingredients needed by the various tissues and organs. The more extravagent the claim, the more bewildering the language of the circulars, the more readily the public swallows the stuff and pays a good round price for it. It is hard to see, how these foods can contain ingredients and virtues that

are not found in the original grain from which they are made. The falsity of the claims is shown by a series of experiments made by Dr. Harry Snyder, professor of chemistry in the agricultural department of the University of Minnesota. He found that in fact many of these health foods are deficient in important ingredients. They are inferior in proteids, carbohydrates and as calorifacients to the common white patent flour. It must be interesting to physicians to know that the patent roller-process flour is also superior in nutritive value to graham and entire wheat flour. Bread made from them, in the order named, give percentage of energy 90.1; 80.7; 85.5; and is digested in the following proportions, 82, 58, 76 per cent. From the fine flour bran, shorts, germ etc. are excluded and they do not contain digestible nutrients. Many of the flaky foods in use now are made from inferior wheat and contain less than ordinary food values. Of grape nuts, claimed to be a "condensed food" of which one ounce is sufficient for an ordinary meal, it is said that it might be prepared by toasting dry bread, rolling it and adding syrup or brown sugar. In fact, the food is almost valueless. Likewise shredded whole-wheat biscuits fall below the mark. Computed by their price and food value ordinary flour would be worth $25 a barrel. Other articles do not show up better under scientific analysis than the two named. Really the only advantage which can properly be conceded to them is that they are easily and quickly prepared for the table. And that is a very questionable advantage, for a proper amount of cooking is necessaryto make cereals wholesome food.

The whole business of the manufacture and sale of health foods is more or less of a fraud. The people are made to pay exorbitant prices for articles which fall below the values claimed for them. We physicians ought to make ourselves familiar with the matter and advise our patrons to stick to plain white bread and the old-fashioned oatmeal, which furnish more nutritive value than the new-fangled things.

RADIUM.

Such remarkable qualities are found to be possessed by the new metal radium that the keenest interest of scientific men is awakened. But little is known of the substance, owing to its rarity and consequent extreme cost. A pound of it, if obtainable at all, would cost $1,000,000 or about $150 a grain. Rather expensive, even for scientific experiment The substance was discovered recently by the French chemists Becquerel and Curie in the course of experiments with uranium salts and was found to possess formerly unheard of radiating energy, 100,000 times greater than even that of uranium. The metal gives out heat constantly, uninterruptedly and indefinitely, about 1½ degrees centigrade, without loss of substance or weight. It is slightly luminous and causes objects struck by its rays to become phosphorescent. Its rays have the same penetrating power as the X-rays and shadowgraphs may be taken by it. In experiments made recently in the Institute of Technology of Boston satisfactory negatives were obtained by an exposure of only fifteen seconds. Photographing with radium is much simpler than with the X-ray, no apparatus being needed. The pinch of the yellowish powder is kept in a small box and the body to be photographed placed between it and the sensitized plate. As with the X-ray, the power of radium varies with the distance of the object photographed. The most wonderful feature of all this is that it will go on without loss of substance and indefinitely, for thousands or millions of years, for all we know.

DISCUSSIONS.

This Department contains each month case reports, letters, inquiries and replies from our readers. If you have a case you would like some help with, or a question to ask, write to us and we will publish it in this Department and you will get the opinions of our medical brethren. When you have an interesting case, write a report of it and send it in and it will help some one else. We need each other's counsel so let us help each other from our experiences. Letters are desired from physicians on any subject pertaining to our profession.

A SOUTHERN DOCTOR'S EXPERIENCE.

GONORRHEA.

I had a family case that would be a surprise to some of the doctors though I guess it is not the only one on record. It was where a whole family except one 10 year old girl had gonorrhea.

A grown son of Mr. O. came to me for treatment and while treating him his little brother about 6 was brought to me for circumcision. I found he had a case of gonorrhea but I performed the operation and put him on treatment.

In a few days another brother about 12 years was brought to me for treatment and on examination I found he had gonorrhea.

Within 10 days I was called to see the mother. She "was having trouble with her bladder" which I found to be gonorrhea. While treating her Mr. O. consulted me as to his condition which was a specific case of gonorrhea.

I treated all of them with kali permangan solution and diuretics and they were soon well enough to drop the treatment. I have never received the fees for the family with gonorrhea yet.

I learned a short time after I dismissed them that there was a house girl employed by Mrs. O. and she had the same trouble, but went to another M. D. for treatment. I suppose she had given gonorrhea to the old man and to the boys. The old man infected his wife. She could have easily infected the small boys by handling their genitals after fingering her own.

I now use calcium sulphide and methylene blue internally and the following as a wash, which has proved a good treatment in many cases:

℞ F. E. hydrastis
Ext. pinus canadensis
Listerine, aa, ℥j
Morphia sulph., gr. xxx
Aqua q.s. ad, ℥viij
M. Sig. Inject 3 times daily.

FAVORITE PRESCRIPTIONS.

While young I bought several quack remedies but never made my cash back on them I never had a prescription that I would not have gladly given to any doctor, and I willingly give my best treatment in any case to help a brother M. D. I am not very expert in prescription writing but I have seen some ℞'s that I would have been ashamed to attach my name to. One was:

℞ Jaundice bitters, 1 bottle
Sig. Teaspoonful every 2 hours.
Signed by an M. D.

A favorite prescription of a physician whom I once knew was:

℞ Chloral hydrat., gr. xx
Bromidia, ℥j
Sig. Teaspoonful for pain.

RECTAL FISSURE.

One M. D. while treating a case of rectal fissure put his patient in the knee chest position and tried to drop carbolic acid into the fissure. Being a little too drunk to see straight he filled the fissure and rectum and it run down the sides of his legs, and the posterior aspect of his scrotum.

I arrived in about 2½ hours and it was sad to see the suffering of that poor man. I relieved him with large doses of morphia hypodermically. Never saw him any more but he died in a few weeks. And I think left most of his doctor bills unpaid.

F. G. THOMASON, M. D.
Kissimmee, Fla.

RHEUMATISM

There has been so much written of late on ihe universal prevalence of all forms of rheumatism, the incurability of most of them, and so many demands for remedies that the introduction of a new curative agent surely needs no apology. I have been using such an agent for the past three months and the results have been eminently satisfactory to both myself and patients. The remedy referred to is a synthetic chemical compound for hypodermic use only. Chemical lymph is composed of the elements required to replenish disordered blood with the necessary cell salts to produce normal blood, the salts of iron, manganese, calcium, magnesium, potassium and sodium, varying in proportion to requirements. A specific lymph is prepared for treatment of each disease for which it is recommended. It is nontoxic and does not contain a single element not to be found in normal blood. It is chemically pure; contains all the remedial elements that enter into the animal lymphs, without the danger, which we have all learned to fear, of contamination from animal diseases. It represents the normal serum of the blood and added to that are elements which antagonize the abnormal elements in the blood that cause the disease. Therefore the patient, while getting relief and cure, is going through a blood building and blood purifying process as nearly along natural lines as as it is possible for human ingenuity to aid in accomplishing. Besides being a pure and potent remedy it has the advantage of posses-ing tonic properties which invigorate the whole system. The heart becomes strong and regular under its use and there is no depressing reaction. I claim it to be a most rational treatment because the remedy enters directly into the blood and antagonizes the direct cause of the disease by coming directly in contact with it; and does not have to contend with the varying conditions of the stomach and other organs of digestion through which medicines taken by the mouth have to pass.

The first case in my practice to be treated by this method was one of chronic articular rheumatism in an English lady sixty-three years of age. The disease had made such rapid progress in spite of all treatment that in two years time she had become so crippled that she was practically helpless; unable to even stand, and every joint was either ankylosed or limited in motion. Her limbs were badly atrophied; knees semi-flexed, rigid and swollen to shapeless masses fully twice their normal size; wrists hard, rigid, with conical masses sloping from the middle of the hands back onto the forearms; hands clenched so that the tips of all except forefingers pressed on the palms and could not be straightened out by force; arms carried in about the position secured by a sling and could not be extended; conical vertebræ, so effected that the head could be only partially turned to either side. These joints were very painful and so tender that a light touch would bring forth an exclamation of distress. Commenced treatment with the synthetic lymph October 26, 1902, injecting ten minims morning and evening. After three days' treatment improvement was noted in lessened tenderness of wrist joints; in two weeks fingers loosened up so they could be partially extended; hands could be put over

head; stiffness of neck was all gone, and patient was practically free from pain. At the end of first month of treatment the arms could be extended to perfect straightness; knees had begun to look like knees and could be partially extended at will. The improvement has been steady, although was somewhat retarded by the severe cold weather. The patient is still under treatment taking one injection daily since the seventh of December. The most I expected in this case was to arrest the progress of the disease, so the above noted results have been gratifying surprises to me.

The second patient on my list was a young married woman in the thirties who suffered a very severe attack of acute muscular rheumatism twenty-seven months previous to her coming to me and had never been free from it. It had particularly affected the muscles of the left arm, so that its motion and usefulness were extremely limited. She commenced taking treatment the last week in October and continued irregularly, taking some days two, some days one and omitting some days. This irregular treatment was continued for six weeks, when she appeared to be free from rheumatic trouble and I discontinued the treatment. The patient has had no return of rheumatic symptoms since; and has made continuous daily improvement in general health which is a fact worthy of note. Besides the rheumatic affliction this patient had suffered for twenty years with severe and protracted supraorbital neuralgia during every menstrual period. Since the time the above treatment was commenced she has passed through these menstrual periods without any return of the old neuralgia.

Mr. H., a retired business man of about sixty-five, had been giving up one pursuit after another for two years on account of constantly increasing stiffness of all joints, more particularly the joints of the fingers, which were so affected that the finger tips could not be closed down to the palms. He was having severe attacks of gout about once in two months, each attack lasting from a week to ten days. Commenced treating him November 15th, 1902, giving an injection of the synthetic lymph daily of two minims. At the end of the first week his old friend gout made a fierce and sudden onslaught. Treatments were increased to three a day, together with antiphlogistine applied to the foot with the result that the patient put on his dress shoes and attended a wedding on the evening of the third day, and on the fifth day resumed his daily walk to the office for treatments. He has had no sign of gout since and is now, after two and a half months of treatment, free from all stiffness and able to enjoy his driving, golf playing, etc.

On December 2d, 1902, commenced treatment of a lady forty-one years of age who had been afflicted nine years with a typical case of rheumatoid arthritis; had taken nineteen different courses of treatment at the hands of as many specialists and was given up as a hopeless cripple. Have given her one injection daily since that date and the result is such that her acquaintances remark on her improved appearance before knowing that she is taking any treatment. Before commencing treatment she could not sit up but a few minutes without bringing on severe attacks of vertigo. Now she can sit erect for two hours at a time without feeling dizzy; can stand erect and walk across a room without her crutches; has increased motion of all joints. The constant pain and tenderness of the joints, which caused her so much suffering, have been practically conquered, only appearing occasionally in one joint at a time. Her nervousness, insomnia and indigestion, which were very distressing, have entirely disappeared. She expects to take treatment for six months and I expect

that her improvement in that time will be something worthy of a separate paper.

Three other cases of muscular rheumatism which have been under treatment less than two weeks are showing marked improvement.

There are modifications of this chemical lymph which are just as efficacious in locomotor ataxia, neurasthenia, and other chronic diseases as this one is in rheumatism, and at some future date I will report just as marvelous results from their exhibition.

F. C. Gay, M. D.
106 Macon St., Brooklyn, N. Y.

COPPER FOR CONSUMPTION.

The newspapers have had flaming, advertisements for the past year of certain parties exploiting copper as a specific for tuberculosis claiming to be the originators of the copper cure. 'Tis true, no living germ can live in a solution of copper. Copper paint will turn the salt water worm from a ship's bottom, when nothing else under heaven will, outside of a metal armor or outside metal covering. This I have known for nearly 30 years.

Prof. Luton, of France, some forty years ago made the announcement that "the cure of tuberculosis can be generally obtained by means of copper phosphide, which however, must be in the nascent state and soluble in an alkaline body. A double decomposition takes place in the stomach and there is a specific action of the copper with a dynamic action on the part of the phosphorus in the preparation."

After the announcement by so eminent an authority, the Van Ness Cooper Co., of 131 W. 14th St., New York city, made the pill coated with egg albumen, which has been extensively used by some of the leading hospitals and physicians in this country. The pill is composed of neutral acetate of copper, sodii phosphate cryst., creosotum spartein, glycerine, glycyrrhiza. My only objection to this pill is that there is too much copper for constant use, but for a brief period it is just right. This, however, is easily overcome. I wish to state that if this pill was made into two parts, one of copper, the other of sodii phosphate, with such other ingredients as are compatible combined with them, then there would be less danger of it spoiling, besides to be certain it will be in the nascent state, each part should be first dissolved in a little water separately, the two mixtures emptied together in milk and drank. The oil in the milk prevents the two chemicals coming together and forming copper phosphide before it reaches the stomach. It causes a great appetite, enriches the blood, cures anemia, kills microbes, etc. Continued too long in large doses it causes pallor, quick pulse, vertigo, besides a too active lung catharsis. I mean by lung catharsis, the copper in overdoses (not poisonous ones) causes an overflow of mucus from the lung tubes upon the principle of the action of emetics. I know that certain forms of tuberculosis are benefited by copper, especially those showing the tubercle bacilli but it is not a specific for consumption by any means.

It possesses untold merits and should be thoroughly tried and tested by the profession in order to learn its true place and value. I am curing consumption by a method of my own, and copper has a place in the makeup. In treating consumption the medicine should be a combination of such ingredients as make blood, kill fever and annihilate the micro-organisms in the blood and secretions, while an inhalation properly administered kills the germ in the cavities and pus found in the lungs. Victory is sure if not a hopeless case.

Dr. J. Zachary Taylor.
Baltimore, Md.

The Wisconsin Medical Recorder.

A Monthly Journal of Medicine and Surgery, devoted to the best interests of the whole profession.

J. P. THORNE, M. D., Editor and Publisher, Janesville, Wis.

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Letters, Case Reports and **Questions** are desired for our Discussion Department.

Society news and reports and items of interest are gladly received.

Vol. 6. APRIL, 1903. No. 4.

EDITORIAL NOTES.

One of the serious problems of sanitary science is to prevent the common habit of expectorating on the pavements of American cities.

The average American citizen acts as though he thought his liberty meant his right to spit wherever and whenever he pleases. A few days ago as we were walking through the business portion of Chicago it was unavoidable to remark on the very large amount of filthy expectorate on the sidewalks. Thousands of women wearing the long skirts of today's style were sweeping up this filth and carrying disease germs to breed disease in high places and low. It is useless to argue for shorter skirts or other dress reform, as fashion rules absolutely. Those that set the fashion are the only ones having any voice in this.

We could not help but think what an easy matter it would be to prevent all this disease-breeding filth if each individual would only do right. If it is necessary to spit why not do it in the road and not on the sidewalk; this would mean clean pavements. But after all the millenium would be here if each individual did what he knew to be right.

A good many subscribers are sending us their 1902 Recorders for binding. We have a very few copies of 1902 numbers left and as long as they last we supply missing numbers of the Recorder without charge when binding the volumes. For 65 cents we bind last year's Recorder's in one volume and return the book by prepaid express. We do not pay transportation on any binding except the Recorder.

When ordering labels or letterheads printed do not sign your name like a bank president or a dean of a medical college; printers have not yet developed telepathy enough to get some men's names when they look at their signatures.

We are unable to supply back numbers of the Recorder to the many new subscribers requesting them. Our supply of the back numbers of this year is entirely exhausted.

Renewals are coming in daily from Recorder subscribers. If yours is due now is a good time to send it in and we will give you one thousand of those premium labels.

Get the latest appliances, the newest books and the best journals and they will put you in a position to make more money.

What the profession needs—less free dispensaries, less credit.

ALKALOIDAL THERAPEUTICS

Original articles, reports and notes on dosimetry are desired for this Department.

ALKALOMETRY.

By Dr. W. P. Hough, Columbia, La.

I enjoyed reading my March Recorder. I admire the liberal but progressive spirit of your journal and am glad to notice that you are giving space for articles on the alkaloidal practice. I have been a subscriber to the Alkaloidal Clinic for five years and use a good many of the Abbott Co's alkaloidal granules especially in my practice. I have studied their action very closely and can say with thousands of other physicians who are using them, that I can treat cases easier and decidedly more successfully with this method than with the older galenic preparations. I believe the method safer as well as scientific.

Dr. Shaller deserves credit for formulating the most correct and easy rule for administering the alkaloids to children, viz: "Into 24 teaspoonfuls of water dissolve a granule for each year of the child's age and one more for the glass, the dose being a teaspoonful at intervals directed." The rule works admirably. To illustrate, I was recently called to see a little girl 3 years of age suffering with a bilious catarrhal fever. I found temperature 104° F., with rapid pulse; the child very restless. I measured out 24 teaspoonfuls of water in a glass and dissolved therein 4 granules of aconitine (amor) $\frac{1}{134}$ grain and 4 granules of hyoscyamine $\frac{1}{250}$ grain, and gave a teaspoonful every 10 minutes until I had given 3 doses. In a few minutes more the temperature had dropped to nearly normal, the skin became moist, the tongue softened and the child perfectly quiet; in fact the whole aspect of the case most materially improved in a half hours time. This case shows the quick and salutary results of the alkaloids given by "Shaller's rule," which is applicable to nearly all the alkaloids. I believe that alkalometry is here to stay. Already thousands of our best physicians have adopted it in their practice and all seem to be enthusiastic in reporting their experience with same.

Burgrave's method of giving a minimum adult dose of the alkaloids at short intervals until the effect of the remedy is manifested, then at longer intervals to sustain the effect if necessary, seems to be logical, at any rate.

Alkalometry is increasing in America and when thoroughly understood will probably be adopted by a large majority of physicians. If you think reports of cases treated by this method will be interesting I will take pleasure in sending you records of some occasionally.

We are sure that the 5000 doctors who take the Recorder will be glad to read Dr. Hough's clinical articles.—Ed.

CALCIUM SULPHIDE.

Calcium sulphide is one of the remedies which the dosimetric practitioners have demonstrated to be of great value in a variety of pathological conditions. The question is sometimes asked: "How does it do this?" Its effect is due to the action of sulphur it contains. It forms sulphuretted hydrogen in the system which is excreted through the lungs, skin and intestines and sulphates which are excreted through the kidneys. The hydrogen sulphide has a disinfectant and alterative action on the tissues of the body.

Dr. S. B. Miller uses it in fevers, especially continued. He says in the

Denver Medical Times of this use of calcium sulphide:

Sulphydric acid, in the form of calcium and arsenic sulphides, may be given in small and rapidly repeated doses until the body is saturated with the drug, as shown by the odor of the acid on the breath and the skin. In some cases saturation is denoted by the occurrence of nausea. When this occurs the doses are to be given less frequently, just enough to keep the body in a state of saturation.

The theory of its action is simple enough, the existence of any pathogenic micro-organism in the body saturated with the sulphides is impossible. Keep up this saturation for a week, and no living bacteria can be found. It matters not what may be the organism, all fall before this potent destroyer.

Let me add that in spite of the bad name given it by the older physiologists, there is absolutely no danger in this medication, and no harm accruing to the user. Calcium sulphide has been administered to adults with gonorrhea up to 40 or 50 grains a day, with only good results; and to infants with diphtheria in doses of 2 grains every hour, with like safety. In these cases, however, there may well have been a neutralization of the drug by the toxins of disease; but in seeking to temporarily inhibit the sexual function, calcium sulphide has been given to masturbators in similar doses, with success, and no sign of toxic action.

These methods are at your service, if you desire to try them It is certain that many physicians in active practice are using them every day, and are enthusiastic in their praise. Moreover, it is stated as a fact that no mosquito, flea or louse, or other insect parasite, will bite a person saturated with calcium sulphide; so that there seems much reason to believe that the parasites of microscopic sizes would be less able to withstand its influence.

THE DOCTORS' LIBRARY

This Department contains each month reviews of the latest and best books. Items of book news will keep readers informed on progress in the world of medical literaure.

THERAPEUTICS OF INFANCY AND CHILDHOOD.—By A. Jacobi, M. D., LL. D. Third edition. Pages, 560. Cloth, Price $3.50. J. B. Lippincott Co., Philadelphia.

This book is one of the master pieces of American medical literature. Dr. Jacobi writes from the experience of a lifetime's work in pediatrics. Whatever Jacobi writes will be read with profit. That two editions of the work have been exhausted in a few years shows that the profession appreciates the value of the book.

In the preface to this new edition the author says: "The past four years have not added much to pedology as a special science and art, notwithstanding greatly increased literature and the contributions of many men active and well known in general medicine and pediatrics. The much discussed subject of infant feeding has enjoyed its universal interest, as formerly; no unanimity of opinions, however, will ever be reached so long as infants insist upon being individualities. The author finds no reason to change to any great extent his convictions as laid down in previous editions on many questions connected with that subject; after all, the soundness of a man's teaching is best demonstrated by the soundness of infant digestion and the number of living and healthy children." The opening words of the book are axiomatic: "Dietetics should be considered a part of therapeutics. The two must always go hand in hand."

The first section of the book, some fifty pages, is devoted to infant feeding, giving the author's opinions on the

subject based on his own very large experience. This part of the book alone is worth the price of the volume. A section on general therapeutics is then given. The author then devotes a section to the treatment of the newly-born. After that sections are given on diseases of the blood and constitution and infectious diseases. Dr. Jacobi then takes up the diseases of the special organs—the nervous system, digestive organs, genito-urinary organs, respiratory organs, organs of circulation, the skin, the muscles, the bones and joints, the ear and the eye.

The etiology and treatment of every pathological condition of infancy and childhood is clearly given. Dr. Jacobi has added to this edition all that he has thought worthy from late literature. As a complete, practical treatise on pediatrics this work will be highly prized by every practitioner who reads it.

THE INTERNATIONAL MEDICAL ANNUAL.—A Year Book of Treatment ment and Practitioner's Index. 1903, Twenty-first year. Pages 740. Extra Cloth, $3.00. E. B. Treat & Co., 241-243 West 23d St., New York.

We again take pleasure in calling the attention of Recorder readers to annual appearance of this unusually valuable book. The size and value of the volume have been increased until the twenty-first issue is one to delight any practitioner. The work presents a review of a year's progress in all departments of medicine and surgery by thirty-three editors.

The "Dictionary of Materia Medica and Therapeutics" is the first section of the volume, this part being edited by Dr. H. A. Hare, who gives a review of the year's advances in therapeutics and a list of new therapeutic agents arranged in dictionary form under the names of drugs, with clinical indications for their use. In opening Dr. Hare says of this encouraging sign of the times: "During the past year the methods of treating disease have been slowly but surely advanced along those lines of rational therapy which are so essential to success in the case of the individual patient and the true progress of medical practice." John Macintyre, M. B., C. M., writes at considerable length on "X-Rays, High Frequency, High Potential Currents, and Light Treatment." Dr. A. D. Rockwell contributes a good article on "Electro-Therapeutics."

The "Dictionary of Treatment" is the second section of the book, giving a review of medical and surgical progress by many contributors. This part of the work is arranged alphabetically by diseases.

"Sanitary Science" is the third part, by Joseph Priestley, B. A., M. D. As usual, Dr. Priestley gives a condensed and interes ing review in his department.

Some of the articles worthy of special mention are: "Surgical Treatment of Cirrhosis of the Liver," by R. Hutchinson, M. D.; "Diseases of Egypt," by F. M. Sandwith, M. D., F. R. C. P., Cairo; "Differential Diagnosis of Hip Joint Affections," by A. H. Tubby, M. S., F. R. C. S., and Robert Jones, F. R. C. S. E.; "Sanatorium Treatment of Phthisis," by T. N. Kelynock, M. D., M. R. C. P.; "Radiography of Urinary Stone," by E. Harry Fenwick, F. R. C. S.

The book is beautifully illustrated with thirty-three plates, half tone and colored, and eighty four figures. There are three plates on the ear, containing twenty-two colored figures, which are so good as to be alone worth the price of the book.

The volume is one which will be of value every day to practical physicians and surgeons.

INTERNATIONAL CLINICS.—A Quarterly of Illustrated Clinical Lectures and Especially Prepared Articles on Medicine, Neurology, Surgery Therapeutics, Obstetrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, and Other Topics of Interest to Students and Practitioners by Leading Members of the Medical Profession Throughout the World. Edited by Henry W. Cattell, A. M., M. D., Philadelphia, U. S. A., with the Collaboration of John B. Murphy, M. D., Chicago; Alexander B. Blackader, M. D., Montreal; H. C. Wood, M. D., Philadelphia; T. M. Rotch, M. D., Boston; E. Landolt, M. D., Paris; Thomas G. Morton, M. D., Philadelphia; James J. Walsh, M. D., New York; J. W. Ballantyne, M. D., Edinburgh, and John Harold, M. D., London, with Regular Correspondents in Montreal, London, Leipsic and Vienna. Volume 4; Series 12. Pages 306. Cloth, $2.00. J. B. Lippincott Co., Philadelphia.

The mail course of instruction is the popular thing today in numerous departments of study. The nearest thing to a mail post graduate course in medicine and surgery that we know of is a study of these International Clinics, as they are mainly a collection of clinical lectures by eminent practitioners in this country and Europe.

We call attention to a few of the noteworthy articles in this volume. Dr. Charles Fox Gardiner presents "The Sanitary Tent and Its Use in the Treatment of Pulmonary Tuberculosis," illustrated with plates. "The Treatment of Chronic Gastric Catarrh" is a valuable lecture by Dr. Heinrich Stern. Dr. E. Lancereaux, of Paris, writes on "Treatment of Aneurisms by Gelatin in Hypodermic Injections." A very practical contribution is "Abdominal Diagnosis," by E. Stanmore Bishop, F. R. C. S , Manchester.

Dr. Robert H. Chase, of Philadelphia, has a good article on "Some Aspects of Paranoia." Surgical lectures are given by M. F. Fallon, M. D., Worcester, Mass., B. G. A. Moyniban, M. S., F. R. C. S., Leeds, J. A. Bodine, M. D., New York, D. N. Eisendrath, M. D., Chicago, Edmund Leser, M. D , Halle.

The monograph in this issue is one which many physicians who keep up to the times, will be glad to read. It is "The Blood in Health and in Disease, with A Review of the Recent Important Work on This Subject," by Thos. R. Brown, M. D., of Johns Hopkins Medical School, Baltimore. This monograph occupies about 100 pages of the volume. Biographical sketches, with portraits, are given of Drs. H. C. Wood and W. W. Keen.

We have mentioned only a few of the features of interest, but it is enough to show that the volume is a storehouse of clinical help. The volume is illustrated with numerous plates, some colored, and cuts.

* * *

NEPHRITIS. PART SECOND, CLINICAL TREATISES ON THE PATHOLOGY AND THERAPY OF DISORDERS OF METABOLISM AND NUTRITION.—By Prof. Dr. Carl Von Noorden, Physician in chief to the City Hospital, Frankfort A. M. Authorized American Edition, Translated Under the Direction of Boardman Reed, M. D., Professor of Diseases of the Gastro-Intestinal Tract, Hygiene and Climatology, Department of Medicine, Temple College; Physician to the Samaritan Hospital, Philadelphia, etc. 112 Pages. Cloth. Price, $1.00 E. B. Treat & Co., New York.

Prof. Von Noorden's handling of the subject of nephritis in this book is bold, original, and somewhat inconoclastic. He rides roughshod

over mosscovered tradition. Nothing is sacred to him but indubitably demonstrated truth. He has a way, too, of confirming or refuting alleged truths for himself taking nothing for granted. This is the proper course in the determination of scientific questions.

The author has by actual experiments exploded the myth so long accepted that the light meats are safer than the dark one in various diseases including nephritis. He has questioned and gone far toward disproving the theory that milk is the best diet in all cases of nephritis. Indeed he has demonstrated that in many cases, certainly, the ingestion of fluids in this disease needs to be restricted rather than encouraged. In various other respects he has established for the treatment of the different forms of Bright's disease, rules founded upon a critical scientific study of numerous cases, instead of the familiar directions handed down from an earlier period when clinical observations were less exact and pathologic theories more nebulous than at present.

BOOK NOTES.

The Chicago Clinic and Pure Water Journal has established a Bureau of Information on Health Resorts, giving full information concerning them.

P. Blakiston's Son & Co., of Philadelphia, have issued Dr. George M. Gould's Biographic Clinics which we announced in these notes some months ago as in preparation. We shall present a review of the book next month.

Battle & Co., of St. Louis, have just issued Chart No. 11 in their series of colored plates on fractures. This one represents a fracture of the shaft of the radius near the center. These plates are furnished to physicians without charge.

Success for April presents a feast of good articles and sound fiction. A few leading features are: "American Grand Opera Singers in Europe," by Comtesse De Montaigu; "How to Form a Library," by Richard Le Galliene; "The Home as a Food Purveyor," by Charlotte Perkins Gilmair; "The Romance of Invention," by Josiah Strong; "Men, Measures and Motives in the Affairs of the World."

Conkey's Home Journal presents five short stories in the April issue, which also shows an increase of eight pages. In addition to the short stories, there are several special illustrated articles and several departments for the home, as well as a department of music. This magazine has more than kept its promise made to its readers a year ago to outdo all its competitors in the five-cent magazine field.

The complete novel in the April Lippincott's Magazine is "The Trifler," by Archibald Eyre, a story which the busy doctor can read as a bit of mental relaxation. Theodore Stanton writes on "Lafayette's Last Visit to America," and Eben E. Rexford on "Next Summer's Garden." Some of the short stories are: "A Fresh' on the Ma'sh," by Dr. Chas. Abbott; "A Lucky Strategem," by Florence Kingston Hoffman; "An Involuntary Benefactor," by Edith Robinson; "Hickey of Old Thirteen," by John Austin Schetty; "A Fiance in Triplicate," by Elliott Flower. The number contains bright poetry and the "Walnuts and Wine" department sparkles with its usual variety of bright things. A busy man needs to read some fiction as a rest to his mental powers, and Lippincott's furnishes just the fiction adapted to a busy man's needs for mental recreation.

The April number of Household is full of the true spirit of Easter, the spirit of helpfulness and happy suggestion for all mankind. The cover design in two colors is by Eliot Keen, and forms a beautiful setting for William H. Haynes' fine poem, "Easter Dawn." The frontispiece is a beautiful reproduction of Alexander Ender's painting, "Easter Morning," and there are a number of other distinctive Easter features in the number. The number contains a variety of good articles and wholesome stories. The various departments of the magazine are up to the usual high standard and will be found full of usefulness for all readers. The Household is fulfilling to the letter the promises made by the management that took hold of the publication at the beginning of the year. It is strong and up-to-date in its contents and typographically is one of the handsomest magazines of the day.

The April McClure's is above all distinguished for the freshness, sparkle, and humor of its contents. Medical men appreciate McClure's. It is also a particularly strong short story number. The leading article, "Masters of Their Craft," by Adrian Kirk, will do any one good to read. The author's master craftsman are a cable car gripman, the driver of a Fifth avenue 'bus, a compositor on a great New York daily, two railroad engineers, and a pick-pocket—all of them as the author shows, artists in a truer and broader sense than many daubers of canvas and moulders of statuary. John LaFarge also writes of a mastercraftsman, "Hogarth," the greatest Englishman who ever used the brush, a splendid article, splendidly illustrated. "I am Married" is the title of Clara Morris's autobiographical paper. The fiction presents varied phases of life and is all interesting. Miss Tarbell writes one of the most eventful chapters of Standard Oil History, which she calls "The Defeat of the Pennsylvania".

We have been so accustomed to beautiful illustrations in our books that we hardly appreciate their value and worth. But books were not always illustrated. The Household for April tells about the first picture book.

Three hundred years ago a German savant had a wonderful vision. At that time children were taught to read by force of arms, so to speak, through hardships and with bitter toil on the part of teacher and of child. It seems curious that the first real step toward lightening the labor of children as they climb the ladder of learning was the product of the imagination, not of some fond mother, or gentle woman-teacher, but of a bewigged and betitled university doctor. It was Johann Comenius, however, who first conceived the daring idea that children could be taught by the aid of the memory and the imagination working together. "By means," as he quaintly expressed it, "of sensuous impressions conveyed to the eye, so that visual objects may be made the medium of expressing moral lessons to the young mind and of impressing those lessons upon the memory." In other words, the good Herr Doctor had the bright idea that picture-books could be useful to children. Comenius made his first picture-book and called it the "Orbis Pictus." It contains rude wood-cuts representing objects in the natural world, as trees and animals, with little lessons about the pictures. It is a quaint volume, and one that would cause the average modern child not a little astonishment were it placed before him. As truly, however, as that term may be applied to any other book that has since been written, the "Orbis Pictus" was an epoch-making book. It is the precursor of all children's picture-books, and modern childhood has great cause to bless the name of Comenius.

THE DOCTORS' WORLD.

Therapeutic Briefs, Medical News Items, and Clinical Notes on Medicine and Surgery.

Quinine Poisoning.—It is well understood by experienced practitioners that some individuals have an idiosyncrasy which makes it impossible to take quinine in any dose without decidedly unpleasant symptoms. Dr. L. A. Conner, of New York, reports, in the Medical Record, a case of almost fatal poisoning from a dose of six grains of quinine sulphate. A druggist gave a healthy man, twenty-seven years old, six grains of quinine in one dose for a "cold".

In fifteen minutes the patient noticed a fluttering of the heart and burning of the skin. He soon became so sick that he was hurried to the hospital. No pulse could be felt at the wrist, respirations were shallow and face covered with cold sweat. The patient was given vigorous stimulation subcutaneously, together with external heat, and half an hour later a feeble radial pulse could be felt showing 180 beats to the minute. Under stimulative treatment the patient recovered.

Paraffine Injections for Nasal Deformity.—Since Gersuny's announcement of success with the subcutaneous injection of paraffine in nasal deformities it has been used by many operators with many good results.

The paraffine is used by different operators at different degrees of heat, from 104° F. to 140° F. The difficulty in using the lower degrees of heat is the difficulty in keeping the paraffine fluid enough to flow through the needle easily.

An ordinary glass antitoxin syringe is used in making the injections.

Quinlan encloses the syringe in a metallic hood through which water at a temperature of 118° F. to 125° F. flows thus keeping the paraffine fluid.

Downie attaches fine platinum wires from a battery to the needle and keeps it warm with an electric current. The paraffine is injected in the median line of the nose and as it enters the subcutaneous structure is moulded into proper position by an assistant. The field must be made thoroughly aseptic. Care must be exercised not to inject too much and over-distend the tissues.

Several have reported trouble from emboli of the venous and lymphatic systems. Downie, in the British Medical Journal, says that complications following the operation are usually due to one of the following causes:

1. To insufficient antiseptic precautions.
2. To the want of suitable apparatus.
3. To the injection of an excessive quantity of paraffine.
4. To insufficient digital pressure around the nose while the paraffine is being injected.

Cooking Meat.—An interesting bulletin issued by the United States Department of Agriculture reports the results of experiments made to determine the changes which take place when meat is cooked. Among the conclusions reached as a result of these experiments are the following: The chief loss in weight during the cooking of beef, and doubtless of other meats also, is due to the driving off of water. When beef is pan broiled there appears to be no great loss of nutritive material, particularly if the material adhering to the pan is utilized in the

preparation of gravy. When beef is cooked in water from 3 to 20 per cent. of the total substance is extracted and found in the broth. The material thus removed from the meat is not an actual loss if the broth is utilized for soup or in other ways.

Beef which has been used for the preparation of beef tea or broth has on an average lost comparatively little nutritive material, though much of the flavoring material has been removed. The amount of fat found in broth varies directly with the amount originally present in the meat, i. e., the fatter the meat the greater the quantity in the broth. The amount of water lost during cooking varies inversely as the fatness of the meat, i. e., the fatter the meat the less the shrinkage due to loss of water during cooking. In cooking in water the loss of constituents is inversely proportional to the size of the piece of meat. In other words, the smaller the piece the greater the percentage of loss. The loss appears to depend also upon the length of time cooking is continued.

When pieces of meat weighing from 1½ to 5 pounds are cooked in water having a temperature of 175° to 185° F. there appears to be little difference in the amount of material found in the broth, whether the meat was placed in cold water or in hot water at the start. The broths obtained when meat is cooked in water do not contain a high percentage of nutritive material, but they do contain much of the flavoring material ordinarily present in the meat.

Charity Work.—All doctors do plenty of charity work. This is right and proper. However, it is wrong to do work for nothing which can be paid for. The greatest amount of such work is done by the hospitals, where thousands of people receive free treatment who can well afford to pay for it. This is a detriment to the whole profession and beats many a needy doctor out of cases he should have and would get. The greatest detriment to the practice of medicine today is the free work done by physicians at hospitals and dispensaries. We are pleased to reprint the following editorial from the Chicago Clinic giving Dr. M. P. Hatfield's views on free services at one great hospital:

Some two hundred Chicago physicians have again tendered their gratuitous services to the Cook County Board of Commissioners. When we remember that this board controls an annual expenditure of $3,816,740 (see sworn statement of its president), the beauty and necessity of this self-sacrifice is by no means evident. Everybody, except the doctors, receive payment at the Cook County Hospital, and they are the only ones without whom the hospital could not exist. Hence, they donate their services. Probably each member of the staff would answer, if questioned, that his resignation would make no difference in the payment of his less fortunate professional brothers. Possibly not, but the refusal of the present staff to donate their services to a board amply able to pay for them, would be the most helpful sign of the times that we could hope for. Everyone admits that the present arrangement is all wrong, but no one, nor the Chicago Medical Society, nor the profession at large appears to dare to make any effort to remedy it. The one who does so will, of course, be misrepresented, for no board in its senses will pay for valuable services which they can cajole the profession into giving for nothing. No, it's worse than that, for unless the profession is grossly slandered, it is the doctors who cajole the board into allowing them to donate their services to patients for whose every other expense the board provides, and if rumor is correct at fully market prices.

CLINICAL SOCIETY OF THE NEW YORK POLYCLINIC MEDICAL SCHOOL AND HOSPITAL.

Regular meeting, with the president, Dr. Alexander Lyle, in the chair.

TRACHOMA.

Dr. Earl Connor read a short paper on trachoma. He said in part: Under "trachoma" are grouped a variety of conditions, apparently dissimilar, whose chief characteristic is hypertrophy of tissue. Clinically, we can safely accept the teaching of Prof. Born as to the differential diagnosis. First, there are cases which may be classed under the head of lymphoid hypertrophy or follicular or granular conjunctivitis. The condition is one of slight consequence to the health of the eye, as it may exist for weeks or months, until absorption takes place, and the mucous membrane returns to its normal condition. Cases in which lymphoid hypertrophy and ulceration coexist the so-called "mixed" cases lead to confusion. These are the ones that are subjected to operation and promptly cured, but they get well under the use of simple astringents and by the correction of the strumous condition which underlies it. The cervical glands are nearly always hypertrophied.

True trachoma is characterized by minute ulcers on the epithelial surfaces of the conjunctiva and cornea, with more or less profuse cell infiltration. In the lymphoid cases there are no changes in the structure of the lids or cornea. In the ulcerous type the changes are more or less extensive and progressive, and it is not a self-limited process. The infiltration and cicatrization continues until a state of atrophy of the conjunctiva is reached, and a more or less dense opacity of cornea results.

Sequelae: It is only the patients who have the lightest attacks, or those who come under treament early, who escape more or less serious impairment of the eyes. Distortion of the eyelids, with faulty disposition of the cilia is common. In extreme cases the cilia are brought into constant contact with the cornea, causing pain and increased reduction of the poor vision by cell infiltration. The contraction of the cicatricial tissue causes atrophy of the mucous glands and, in the final stages, reduces the conjunctiva to a dry, cuticular membrane.

Corneal opacities are the after-effects of both ulcers of the cornea and of pannus. A recent pannus, it is true may disappear completely by a process of reabsorption, so that the cornea reacquires its normal transparency, but often, further changes take place in the pannus which render its disappearance impossible. Transformation into connective tissue occurs if the pannus is of long duration. Such a cornea never becomes perfectly clear again. This is true of cases in which the pannus is complicated by ulcers; the regions which are occupied by the latter likewise become permanently opaque. Trachoma is a disease wnich is distinguished by its duration, in many cases rendering those who are attacked by it wholly or half blind. Add to this the fact that because of its infectious nature it is exceedingly apt to spread, and one can understand why in those regions in which it is endemic, it is a veritable scourge.

Treatment: In the acute stages the application of silver nitrate until the secretion is lessened, and then of sulphate of copper (blue stone) as the condition demands more or less stimulation, will give the best results.

Dr. W. E. Lambert, opening the discussion, said that there is a great deal of uncertainty regarding the pathology of trachoma, as the bacillus has not yet been discovered. There is lit-

tle doubt, however, that it is contagious. The so-called various forms of trachoma are simply different stages of the disease. He differed with Dr. Connor as to treatment, stating that he was convinced by considereble experience that in all cases in which granulations are present, the operation of expression gives the quickest and best results.

RENAL CALCULUS.

Dr. J. A. Bodine showed a renal calculus which he had removed from the pelvis of the kidney of a patient 55 years old. For the past nine years, the man had suffered from a dull, aching pain in the right loin. During the first two years this pain was characterized occasionally by acute exacerbations, which were so severe as to necessitate rest in bed and opiates for relief. During the past five or six years, however, these exacerbations lessened in severity and duration. He found that by lying down and raising his feet above the level of his head the pain would disappear. His urine at no time showed kidney detritis or abnormality of any kind. A radiograph was taken, and showed accurately the presence of the stone. Its removal was very easy, and if, the speaker said, in all kidney work the placing of the patient in a prone position, over an air cushion, were taken advantage of, surgery of the kidney would be greatly facilitated. In this case when the kidney was withdrawn through the wound, the stone was felt lying in the pelvis. An incision was made through the parenchyma of the kidney along its convex surface, sufficiently large to permit the introduction of a finger into the pelvis over the stone. Incision into the pelvis of the kidney offers greater liability of persistent urinary fistula, and unless such incision can immediately be sewn up, it is better to make the incision through the renal substance. This case demonstrated the fact that the primary renal calculus may remain for years in the pelvis of the kidney without exciting inflammatory changes in the renal tissue or causing abnormalities in the urine. The change in the acuteness of the exacerbations of pain was another proof that in primary stone in the pelvis of the kidney the danger and pain are in inverse ratio to the size of the stone.

GLASS REMOVED FROM THE EYEBALL.

Dr. W. E. Lambert showed a piece of glass which he had removed from the lens of a patient, preserving the eyeball in a practically normal condition.

FATAL THROAT COMPLICATION IN THE CONVALESCENCE OF TYPHOID FEVER.

Dr. F. S. Quinlan said that he had been called to the New York Hospital on the morning of January 5 to see a physician convalescing from typhoid fever, then in his ninth week. Previous day his temperature had been normal. The night previous, following a slight cough, he developed laryngeal symptoms, such as hoarseness, which abated after a while, but increased again so much that dyspnea was alarming. The patient was in a very bad condition, almost unconscious and cyanotic, and it was at once decided not to intubate, but to perform a tracheotomy. This proved of only temporary benefit, as he died a short time afterwards. The speaker said tnat he had seen five such cases during the past five years. It seemed to be a vasomotor disturbance of the mucous membrane. All the patients were adults.

DIAGNOSITIC AND PROGNOSTIC DATA IN NERVOUS AND MENTAL DISEASES,

the paper of the evening, was read by Dr. W. B. Prichard. He said in part:

Diagnosis in neurology and in mental disease demands consideration from

two standpoints: general and specific. The issues in surgery are direct and relatively narrow, as in ophthalmology, dermatology, etc. The most intimate and essential relationship exists between nervous diseases and all other diseases. An old history of renal colic in a neurasthenic may prove the guiding factor in treatment. Auto-intoxication from a stomachic or intestinal deficiency is often the causative factor of a neurosis or a psychosis. The dependence of all bodily functions upon the integrity of the related nervous supply and action is conspicuously obvious. Hence the neurologist must be an evolutional development from the general practitioner. By collateral territory requiring consideration, I mean such factors as race, environment, temperament, occupation, age, sex, social and educational status, heredity, etc. Detailed study of the temperament is of special importance, and should always be made exhaustive, since the personal equation depends upon it, and an exact knowledge of the personal equation is often the determining factor in results. Neglect of this equation prevents a sympathetic understanding, lessens your patient's capital in confidence, and by so much, diminishes your chances of successful results from treatment.

Environment is sometimes a significant factor. Neurasthenia is much more common among residents of the city than the country. This is true also of chorea, and since syphilis is a disease of the city, its sequential nervous manifestations are much more frequent in metropolitan practice. Age, sex and occupation are of especial etiological interest. Chorea, poliomyelitis and to a less degree perhaps, epilepsy, are all diseases of childhood. Posterior sclerosis and its cerebral equivalent, paretic dementia, are diseases of adult life. Women tend to the minor, men to the major neuroses. Organic disease of the nervous centres is more common in males than females. Neurasthenia and kindred affections are so peculiar to the cultured, educated classes as to appear almost a penalty. It is a waste of time to hunt for neurasthenia, except the traumatic form, in the uneducated laborer: the diagnosis would make a paradox.

The prognosis in nervous diseases and the insanities is far better than is generally supposed. I believe the proportion of recoveries is as great as in almost any other specialty. Certain forms of nervous disease, are, however, hopeless. I have yet to know personally of recovery in general paresis, Landry's palsy or multiple sclerosis. Decided benefit may be obtained from treatment in tabes, in paralysis agitans and in epilepsy. The prognosis in neuritis and in neuralgia is nearly always favorable, although tic douloureux is often viciously intractable and sciatica obstinate. Excluding the tuberculous variety, more than fifty per cent of recoveries occur iu meningitis. The most discouraging cases of myelitis, especially when traumatic, may turn out well, and many hemiplegias, especially if syphilitic, recover. A syphilitic etiology favorably modified the prognosis in mental and nervous diseases except in tabes, general paresis and epilepsy. Among the insanities, all of the non-organic type are recoverable, and the majority give excellent and prompt results from treatment. A vicious heredity always makes worse the prognosis. The more anomalous the type in epilepsy, chorea and neuroses generally the better, as a rule, the prognosis. Etiology is relatively unimportant in its bearing upon prognosis in many of the neuroses.

Removal of the cause, to be effective in promoting cure, must be prompt, so prompt, indeed, as to almost precede a diagnosis. If allowed to continue, a vicious habit is induced, which persists in spite of the removal of the

cause. This is an important fact to be borne in mind in estimating the prognosis in traumatic epilepsy, in reflex chorea and other neuroses, in various neuralgiae and in certain monoparesis.

Dr. J. P. Tuttle in opening the discussion, said that he wlshed to emphasize the influence of the digestive and intestinal tracts upon neuroses and psychoses. From time to time he has seen patients with delusions, manias, melancholia, etc., and his part of the work has been treatment of the intestinal conditions. Three cases of unconsciousness, followed by delusions, were due to fecal impaction, and the patients recovered after the putrefactive matter has been removed. He has also seen two cases in which the melancholia had been completely removed by opening up and draining the gall bladder. Black bile is generally due to an infection of the gall bladder, and absorption of its toxic principles, and has something to do with making the patient "blue". He has seen a patient who has suffered from insomnia for two weeks, apparently without reason. His bowels had not moved satisfactorily for three weeks. He had had movements, but there was always an inclination to have further passage. Examination with the sigmoidoscope showed a mass which could not pass the sigmoid and rectum. Introductions of a fifteen per cent. solution of peroxide of hydrogen removed the mass. The next night the patient slept perfectly, and his insomnia had apparently passed away.

Dr. D. S. Dougherty read the following report of a case of

SYSTEMIC INFECTION THROUGH THE TONSIL:

Patient, a girl, 20 years of age, previous good health; family history, good; occupation, fur worker. First seen May 4, 1901, complaining of sore throat, headache, pain in the muscles of limbs and back, and feeling of general malaise. Temperature normal. Examination of the throat showed mucous membrane of fauces and pharynx congested, right tonsil and peritonsillar tissues slightly swollen and oedematous, having a darker hue than the surrounding tissues. Throat externally exceedingly painful to touch. Diagnosed as phlegmasia tonsillitis, with probable beginning paritonsillar abscess. Painted it with a 20 per cent. solution of nitrate of silver, and gave one grain of calomel every hour for six hours, followed by a saline and 5 grains of salicylate of soda.

May 6th. Temperature, normal; pulse, 80; felt much better; general condition of throat much better, but right side still slightly swollen and inflamed.

May 9th. Severe headache and pain in muscles, but especially in back of neck. Temperature, 100.3 F.; pulse, 120; throat much the same, except that the peritonsillar tissue was of darker hue and more swollen. Suspecting pus, a puncture was made, but could find none, even on deep exploration. During the next few days the throat symptoms subsided, but the patient still complained of pain, headache, slight nausea and vertigo on lifting head. Temperature ranged from 99 to 100 degrees F. Took a couple of slides of mucoserous exudation from tonsil; took blood for Widal test.

May 13th. Pulse ranged from 120 to 180; temperature, 100 to 103 degrees F. Patient developed positive coma, muttering delirium and spastic condition of muscles of neck and back. Respiration was short and rapid, pulse feeble and jerky. Seen by Dr. A. R. Robinson, who confirmed the diagnosis of leptomeningitis. Was now administering bromides and morphin hypodermically, ice bags and sponge baths.

Patient continued in this way until May 15th, with intervals of consciousness, when she complained constantly of photophobia and headache, and she developed a bad cough. Examination showed bronchial breathing over both lungs. Pulse, 140; temperature, 100 degrees F. Began small doses of strychnin sulphate.

May 17th. Attention was called to white swelling on shoulder, which on palpation proved to be a large abscess in joint. This day administered anti-streptococcic serum of board of health. Temperature fell slightly, and patient seemed to recover consciousness, but again relapsed into coma.

May 18th. About a quart of pus evacuated by Dr. J. A. Bodine. Second dose of serum without results.

May 19th. Evacuated abscess in right hip, and on May 21st in left hip. These abscesses were thoroughly drained and washed daily with normal salt solution. Rectal enemata of normal salt solution were administered every four hours. Breath became fetid.

Until May 29th the patient continued in coma, with temperature from 100 to 103 degrees F.; pulse from 140 to 160, and respiration from 30 to 40, with periods of muttering delirium. On May 29th physical signs of pulmonary edema; patient suddenly seized with a violent struggle to cough, evacuated through the mouth about half a pint of pus, and died.

THE OPPENHEIMER INSTITUTE.

Dr. Isaac Oppenheimer has for years given the treatment of diseases due to alcoholic and drug addiction special study. For ten years he has conducted an institute for the treatment of these diseases by his methods and has had great success. The work has been carried on at the Oppenheimer Institute, which has been obliged to enlarge its facilities to care for the increasing number of cases.

Recently the company has been reorganized with ample capital and the field will be much enlarged, and it will be seen from a reference to the list of directors and advisory directors, that the work has been, after a very careful investigation, endorsed by men of probity and eminence. It is the intention of the new management to conduct the institute along strictly business lines and in such a manner as to retain the confidence and support of the medical profession.

Physicians who refer their patients to the institute for treatment may be sure they will be returned to them relieved of their unfortunate habit and prepared to take up their life's work again in a proper manner. The capacity of the institute has recently been enlarged so as to meet all demands made for treatment of cases of alcoholic intemperance and drug addiction, including opium and its derivatives; cocain, chloral, arsenic, tobacco, and in certain cases "neurasthenia."

The main institute is in New York city, but branches have been established in a number of the large cities.

Atlantic City, N. J., is gradually developing into an all-year-round health resort and its very favorable winter climate is doubtless due to its nearness to the Gulf stream.

One fact that demonstrates the growing importance of this resort is the fact that the Oppenheimer Institute has recently opened a branch at that place, and it is their intention to keep it open the year round.

Patients who are now being or who may hereafter be treated at their institutes in New York, Philadelphia, Detroit or Pittsburg, will likely find it quite convenient to spend part of the time they are under treatment at Atlantic City.

MODERN THERAPEUTICS

Brief original communications and short abstracts giving the latest in therapeutics.

TUBERCULOSIS.

There is no postive cure for consumption outside of an element or influence that restores normal nutrition that enriches the blood and builds the tissues. This being accomplished, Nature does the curing. The sooner we all accept this demonstrated fact that general vital recuperation, by whatever means it may be accomplished, is the only cure that is scientfic, that has ever been known or ever will be known, the less time we will lose in conducting the royal battle with this fatal scourge.

Patients who die of tuberculosis, starve to death. Those who recover from tuberculosis, are fed to health—cured by feeding. Feeding, however, is not necessarily nourishing, no more than eating is assimilating. Thousands of victims of this wasting disease starve with stomachs full, and plenty more within reach. There is no dearth of elegant and costly viands—it is availability they lack. They call for an exhibition of vito-chemic force which the consumptive's stomach does not possess. Bovinine does nothing of the kind. It is living tissue pabulum in natural solution and instantly available. It responds at once to the demands of the starving organism.

Life nourishes life, cell rebuilds cell, and the life of all cells is the circulating, vivifying fluid, the sap in the tree, the blood in the animal. Plants transmute crude inorganic matter into organic matter into organic forms; animals take up vegetable organisms and advance them to a higher stage. Each advance is an intensification, a rise in the vital scale, a further refinement of cell structure and cell function.

Bovinine quickly and permanently restores the broken constitution of the consumptive by supplying the vitalized protoplasm, living cells, ready for instant appropriation, without taxing the digestive system. It builds up the demoralized system by furnishing the ready-prepared pabulum, and by resting them, restores the digestive and assimilative functions. The victims of consumption starve because the vital organs tire out and give up the struggle surrendering to the forces that disintegrate and destroy.

Bovinine bases its claims wholly on its direct and positive influence in restoring vital tone, flesh and strength to the debilitated system. It supplies the shattered and wasted organism with exactly what it must have in order to recuperate, and supplies it in a form that is immediately available.

AN OLD FRIEND'S INDORSEMENT.

In the "Reference Book of Practical Therapeutics" compiled by our old friend, Frank P. Foster, A. M., M. D., Editor of The New York Medical Journal, we note the following:—"Antikamnia tablets have been much used and with very favorable results in neuralgia, influenza and various nervous disorders. As an analgesic they are characterized by promptness of action with the advantage also of being free from any depressing effect on the heart." We are pleased at this expression of faith in the efficacy, promptness and abscence of untoward after-effects of this most excellent remedy. We feel that the statment applies not only to antikamnia tablets,

but to any of the tablet specialties offered to the medical profession by the Antikamnia Chemical Company of St. Louis, Mo. Physicians desiring samples should write to this company for them and they will be forwarded promptly, particularly, if they mention the Wisconsin Medical Recorder.

PASSIFLORA.

Daniel's conc. tr. passiflora incarnata. should be prescribed for nervous complaints, including headache from alcoholic excess, fits, hysteria, epilepsy and insomnia. As a cure for impotency it has no equal. It's quieting influence is made quickly apparent in cases of convulsion, causing immediate relaxation, and preventing a recurrence. This remedy is also highly recommended in all menstrual disorders. especially dysmenorrhea and uterine congestion.

LAGRIPPE.

Often when a cold sponge fails to lower the temperature, a hot one will, and it may also be more acceptable to the patient. The treatment of the conditions of exhaustion and malnutrition, following the malady, presents as many aspects as the treatment of the disease itself. Of the host of tonics on the market, cod-liver oil is, in my mind, the best. To many patients, however, the taste is very disagreeable, and the stomach rebels after one or two doses. To obviate this, I have lately been using cordial of cod-liver oil compound (Hagee) with most gratifying results; it takes the place of the raw oil completely, with none of its bad effects. The use of the cordial, in conjuction with iron and the bitter tonics, has given me the best satisfaction.—Extract from article by Dr. Jos. E. Harris, Ft. Steilocom, Wash.

BRIEF MENTION.

Pyridine tannate is a solvent of uric acid and an intestinal antiseptic.

Degeneration of nerve tissue indicates the administration of arsenauro.

Every subscriber to the Recorder gets one thousand prescription labels as a premium.

Veronal is a new synthetic hypnotic which promises to be of value. The dose is 4 to 15 grains.

The greatest surgeons use the ambulatory pneumatic splint. It will prove a money maker for you if you use it.

The H. M. Merrell Co., Cincinnati, makes reliable pharmaceuticals for physicians. Send for their price list.

If you want to cure epilepsy write Dr. W. Towns, Fond du Lac, Wis., and he will tell you of his successful method.

Lanikol is a necessity in dermal therapeutics. Write the Lanikol Chemical Co., Milwaukee, Wis., for samples.

The maltzyme products are all made on honor and are exactly as represented. They are malt preparations par excellence.

The Chicago Pharmacal Co. makes a line of specialties which every prac-

titioner needs. Samples sent upon application.

The Wheeler Chemical Works, Chicago, make some elegant and efficient preparations. We have used them and know that they are good.

Chloropepsoid is a quick and efficient remedy to relieve the pain of dyspepsia and indigestion. If you get a sample and try it you will find this true.

The Herzog Medical and Microscopical Laboratory, Chicago, makes chemical and microscopical examinations for physicians at reasonable prices.

Pill cascara compound (Robins) cures constipation. Recorder readers can obtain samples to demontrate this by writing to A. H. Robins, Richmond, Va.

Dr. Becker's compound digest is of much service in acute or chronic diarrhea, dysentery, cholera morbus or cholera infantum, where perfect digestion is essential. Samples on application.

When using apomorphine hydrochlorate it is well to remember that the preparation should be fresh. Very alarming symptoms have followed the administration of old solutions of apomorphine.

Precipitated metallic tin is recommended as a teniafuge. It is claimed to be efficient and is not toxic as the salts of tin are. Five or six 8 to 10 grain doses are given at intervals of 15 minutes, followed by a dose of castor oil.

Gray's glycerine tonic comp. owes its distinctive value to the proportion of the contained ingredients and their manner of combination. All imitations lack these characteristics of the original and are consequently of inferior value.

Iron preparations spring up like mushrooms in a night. The one backed by clinical evidence in hospital practice is the old stand-by, Gude's pepto-mangan, which is the standard of known worth and which gives positive results.—Medical News.

Dr. Miller calls attention in his article this month to the necessity of sharp instruments and also to the fact that they can best be kept sharp with a hone. We can add to this that Harrington's dry hone is just the thing to sharpen instruments and is superior to the ordinary.

My experience with sanmetto has been most gratifying. I consider it the greatest remedy I ever used in cases of aged men with large prostate. I am now using it in two cases of nocternal incontinence; both children are improving rapidly.—W. H. Lyle, M. D., Olpe, Kans.

Dr. John Aulde has done an immense amount of valuable original work in the newer therapeutics. If you are interested in modern therapeutics it will pay you to address him at Kennett Square, Pa., for several of his latest little books, which he will send you free of charge.

Triacol is very necessary in the treatment of respiratory disorders. Send for a free sample and prove its value. Dr. Fred W. Wersebe, New York, says: I have found in triacol an efficient and non-irritating combination of drugs whose value in indicated conditions is indisputable.

* * *

A patent has been granted for a process whereby artificial camphor can be made, which is identical with the natural product. It may be prepared by treating water-free turpentine with oxalic acid, whereby pinyl formate is produced. This is distilled with lime, and barneol and camphor result, which may be distilled off.

* * *

In disturbance of the menstrual functions Hayden's viburnum compound has gained the reputation of a standard remedy. In those forms of menstrual disorders in which there is no organic disease but a functional disturbance, its continued administration in connection with appropriate hygienic regulations, has often been sufficient to produce a cure.

* * *

Suggestion, when properly understood and used, is a valuable therapeutic measure. If you are not up on this we advise you to improve the offer made by the Chicago School of Psychology. If you write the secretary, H. M. Fyler, 4074 Drexel Boulevard, Chicago, he will send you interesting literature and a sample copy of Suggestion, the monthly magazine.

* * *

H. Kirk White & Co., Janesville, Wis., make a fine line of standard pharmaceuticals and specialties. Their business has so increased that they have been obliged to fit up a larger laboratory. They have just moved into their new laboratory, which has the latest and best apparatus for manufacturing. If you wish to try their products they will send you a nice box of samples if you pay the express charges.

* * *

Aletris cordial, Rio, is an emmenagogue, not abortifacient. It cures congestion of the uterus and ovaries, and favors the occurrence of the menstrual discharge. It is also especially appropriate when the amenorrhea depends upon anaemia. It regulates menstruation, and is useful in all the derangements of menstruation, namely, amenorrhea, dysmenorrhea, and metrorrhagia, provided these disturbances be idiopathic. By curing menstrual disease, a common cause of sterility, it will also cure the sterility. It is also recommended in erosions of the cervix and vulvar eczema.

* * *

Mr. Harrington's signal success with his dry hone has proven him to be a past master in the hone business. The "dry" is without question an article of rare merit, and with his new ageing processes he assures us we may expect still greater things in the near future. Barber supply houses from coast to coast handle the "dry" in gross lots, which, together with foreign trade already established, shows a record in a few months' time never before heard of. Below is a sample of letters received daily by Mr. Harrington:

Winnsboro, Texas, March 17, 1903. Mr. E. A. Harrington, Waukesha, Wis.:—Dear Sir: I received the hone I ordered yesterday. I tried my old dull razor and soon had a good edge on it. I can shave now with perfect ease. Will try and induce my friends to send you orders. With best wishes I remain, yours truly, M. B. Pollard, M. D.

MEDICAL RHYMES

By C. E. Boynton, B. S., M. D., Los Banos, California.

SYNTHESIS.

Urea from ammonium cyanate
Was made by Woehler eighteen twenty-eight.
By heating K and C 'till they are white
With O and N men made the cyanite,
Which by some more of O in combination
Yields up the -ate at last by oxidation.
Then step by step such work was done as this,
'Til life almost came out of synthesis.
Soon chemist in the lab may start competing
With life to make the food that we are eating;
So with air and water art may yield
The product of the farm yard and the field.

THE SPECTRUM.

The swift vibrating rays of light
  That strike upon our sphere
Are colorless unto the sight
  And soundless to the ear.

But defracted through close grated bars,
  Or through a prism thrown,
The light of sun or moon or stars
  Shows not one hue alone.

The rainbow's seven tinted shean
  Before our gaze is spread;
The violet, indigo, blue and green,
  The yellow, the orange, the red.

THAT BABY.

Our baby, our baby is pretty,
  And all of his fingers and wits
Are directed to hunting up titty,
  For he thinks that the world is all tits.

There are tits hanging out in all places,
  And hunting for something to eat
He feels them right there where his face is
  And he sucks at the rim of the sheet.

The Wisconsin Medical Recorder.

A Monthly Journal of Medicine and Surgery, Devoted to the Best Interests of the Whole Profession.

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LEADING ORIGINAL ARTICLES.

THE TREATMENT OF STRICTURE BY ELECTROLYSIS.

By Dr. Gordon G. Burdick, Chicago, Illinois.

Chief Surgeon People's Hospital; Professor Radio-Therapy and Photo-Chemistry, Illinois School Electro-Therapeutics; Associate Professor Surgery, Post Graduate Medical School; President Chicago Electro-Medical Society.

No one subject perhaps has caused more real suffering, and a more serious train of diseases than stricture of the male urethra, and there is no other disease that is likely to remain with us for a longer length of time, as long as "boys will be boys." The average young man at the present time does not think he is a man until he has had gonorrhea a few times, and can state boastingly that he would as soon have it as a "cold."

Eventually there comes a time when he is not so sure about the matter, and he is reluctantly forced to acknowledge that his early idea regarding his process of becoming a man has very serious drawbacks; in fact that he did not lay the foundation for manhood but for chronic invalidism. There is no one subject in medicine that has had so little attention paid to it as gonorrhea. Empirical treatment has been adopted by different men and slavishly followed by the medical profession with the result that today physicians have no rational method of treatment for this disease, and have divided into two methods of treatment. First, the antiseptic, local method by injection; second, by administering large doses of some irritating balsam that stops the discharge by causing oedema of the kidneys, and in fact the whole urinary tract.

Both systems of treatment are objectional when carried out in the usual manner. Strong drugs destroy the continuity of the mucous membrane covering the urethra, and allow cicatrical tissue to form if it is not replaced by mucous membrane, which has the property of breaking down and contracting more and more each time it is disturbed, and eventually the contraction proceeds to the point where it encroaches upon the lumen of the urethra to a serious extent, and considerable force must be used to empty the bladder, causing a gradual growing hypertrophy of that organ to take place, and making it impossible eventually to completely empty the bladder each time allowing the residual urine to be retained, and fermentation takes place. This process if not arrested in

the earlier stages may extend to the kidneys. Occasionally carelessness in using injections causes the fluid to be carried into the bladder setting up a gonorrheal cystitis, which invariably finds its way to the kidneys, paving the way to a number of distressing troubles that may follow in its wake. A grave complication frequently accompanying gonorrhea is tuberculosis, which accounts for the obstinancy of many cases to all forms of treatment. The acute stage lasts longer, and is more violent, and the discharge persists for many months or years before yielding to ordinary methods of treatment. Double staining shows the presence of both gonococci and tubercle bacilli. The danger a girl runs when she marries a man with an uncured case of infection may be readily understood by looking over the statistics of gynecological surgeons.

The method in use for the treatment of stricture leaves much to be desired. The general one of dilation by means of sounds is very objectional owing to the amount of traumatic violence generally used, and the presence of infectious material either upon the sound or within the urethra, allowing an invasion into the deeper structures of the infectious germs. Forcible divulsion and division by means of the various urethrotomes leaves much to be desired, inasmuch as every cut is replaced by cicatricial tissue to say nothing of the severe amount of pain endured by the patient while being sounded to keep the edges far enough apart to give sufficient lumen to the urethra.

Newman and Lydston devoted considerable time to investigating the subject of strictures from the standpoint of electro-therapeutics, and demonstrated the fact that the cicatricial tissue could be absorbed readily by means of the galvanic current, using the negative pole in contact with the tissue to be absorbed. No success was obtained by their imitators because of defective knowledge concerning the uses of the current. Many of them found no difficulty in dilating the urethra, but found that their work was in vain, because it was promptly replaced by cicatricial tissue, therefore, the methods fell into disuse except in expert hands. The olive-pointed metallic bougie used by Newman, although objectionable for general use, dissolves all cicatricial tissue, as well as mucous membrane, it encounters in the urethra. If a stricture is very tight it is desirable to increase the diameter in the same way the surgeon does by cutting forward, and I have devised a set of olive-pointed bougies that are insulated all except a metallic blade that projects upon the anterior surface and am able by this means to dilate the urethra as large as required at one or two settings without pain or discomfort, and then by using a mild current of 2 m. a. with the metallic olive-bougie can soften and cause the absorption of any cicatricial tissue without destroying the mucous membrane by carefully insulating all portions with gutta percha, except that part in contact with the stricture. The stricture remains patulous to sounds until a complete cure takes place. I have used this method now in 80 cases, a few of which have had an external urethrotomy in order to relieve the reoccurring obstruction, and with good success, as many of the victims are now without trouble for over three years. The main difficulty that has been encountered is to control the infection, and various means have been used to accomplish this end. Since the discovery of the X-ray a useful means of controlling the tubercular infection in obstinate cases has been found, and many cases will respond to a few treatments that would not yield to months of close attention by any other means. Cases that will not yield to the X-ray have

been found amenable to treatment by means of the glass urethral electrode connected to the high frequency coil. The violent ether stresses or turmoil of the atmosphere produced by this type of apparatus has been found sufficient to decompose the nitrogen of the air, forming an oxide of nitrogen, which the profession have been calling "ozone", which has a very marked antiseptic effect in the presence of moisture, and readily destroys bacteria brought in contact with it. Occasionally the invading germ is embedded so deeply that ordinary means will not reach it, and we find it necessary to use copper electrolysis in order to destroy the infection, and the method of accomplishing this is by covering a copper electrode with a piece of pericardium and attaching the electrode to the positive pole, driving into the tissue the copper ions which are destructive to nearly all bacteria. The process is continued until the tissues are stained a deep blue color, about 13 m. a. of current being used in the process, and continued for ten minutes once a week until the desired results are obtained. Occasionally an alternating sine current accomplishes the process more satisfactorily, as the copper ions are thrown off, while the irritating acid oxygen gas is neutralized at each reversal, thus preventing the destruction and hardening effect upon the mucous membrane of the urethra. The nutritional effects of the alternating current should not be forgotten, as it has a vital stimulating effect upon protoplasm, that cannot be equalled in any other way, and a few treatments by this form of electric energy will surprise many by the way tubercular ulcers, located in the urethra, will granulate, and the pain and soreness leave, bringing about a cure that seems little short of a miracle considering the way these ulcers resist all forms of treatment at times. It should not be necessary to enjoin upon the electrician the necessity of perfect surgical cleanliness when invading the male or female urethra, and the mechanical construction of his electrode renders it a very difficult matter at times to accomplish, and I have been compelled to keep mine in a solution of formaline in order to insure sterilization, as boiling destroys the shape and form of the hard rubber used for insulation, and farther it should be stated that the negative pole has no antiseptic properties, and this peculiarity of the electric current is confined to the positive pole only, and is probably due to the ions from the electrode passing into the tissue and forming salts.

A large field is open for further experimenting by trying some of the numerous metals as the anode, a fruitful field of discovery is open along this line.

TYPHOID FEVER.

By W. E. Nichols, M. D., Andrews, Indiana.

Typhoid fever is an acute infectious disease, said to be due to the implantation and proliferation of the bacillus of Eberth in the ileum, and characterized anatomically by enlargement of the mesenteric glands, and the glands of the small intestines. In this fever these glands inflame, and some of them ulcerate, more or less, which is the cause of soreness and, sometimes, swelling of the bowels.

The blood is impregnated with a peculiar poison, that is either generated within the system, or absorbed or inhaled from without.

That it is a germ disease is now disputed by none, but just where these germs come from and how they are produced, is often a problem not easy of solution.

Typhoid fever is sometimes caused by decaying vegetable substances, such

as rotten chip piles, rotten cellar floors, rotten pump logs, brush, etc. Impure drinking water, water from half dry wells and springs, and branch water will cause the disease. Long hot summers where there is a scanty rainfall, are generally followed by a large amount of typhoid fever.

The first symptom is a sense of weariness and indisposition to labor, want of appetite, a slight coating of the tongue is generally noted within a day or two; the disease generally sets in very gradually, and is often well advanced before suspected; there is generally headache, anorexia, a furred tongue, nausea and chilliness but seldom a decided rigor. Usually about the eighth day, rose colored spots appear on the abdomen and chest. The fever is at once the most characteristic symptom and from the temperature alone a diagnosis can be made.

I have frequently met with fever at 105° and 106° F. followed by recovery; but look for fatal results where temperature exceeds 106° F. The temperature in favorable cases will generally go up to 104° or 105° F., remain stationary a few days then gradually go down.

The pulse does not generally run very high, from 90 to 120.

Constipation is generally met with for a few days after the onset of the fever, giving way to diarrhea, which is sometimes a very marked symptom. Tympanites often from the start, is a very troublesome complication, it is always present; where there is no tympanites there is no typhoid fever. The accumulation of gas is due to atony of the bowels.

The tongue, at first furred, pointed, and red on the border, becomes dry and brown and often black, sometimes very red and fissured about the centre.

It is criminal to treat typhoid fever by the expectant plan, it is a septic process from the start, and no physician in his senses would treat child bed fever, malignant carbuncle, or other septic disease without cleansing the source of infection.

Give plenty of water in typhoid fever, as an abundant consumption of water by the patient constitutes the most important means of ridding the system of toxins in this fever, as the urine is the most efficient excretion for their elimination.

As the heart is the chief sufferer in fevers, support its nutrition and functional capacity from the first. I use strychine sulphate $\frac{1}{50}$ grain; four or five times a day, as needed, through the whole course of the disease.

Cleanse the whole intestinal tract thoroughly, as soon as called, with small doses of calomel and soda, often repeated, use calomel $\frac{1}{10}$ grain, soda 1 grain, every hour for ten doses.

Follow with the red iodide of mercury $\frac{1}{16}$ grain every three hours for several days, this is used as an intestinal antiseptic and eliminant, and I find where it is used that it shortens the duration of the fever from twenty-three days to ten or twelve.

Turpentine stupes should be applied to the abdomen, for the tympanites. For the diarrhea, if any comes up, give copper arsenite $\frac{1}{100}$ grain six hours apart, to be given in plenty of water.

When temperature is above 103° F. it should be reduced with the sponge bath or wet pack.

Hemorrhage should be treated with absolute rest and quiet, cold applications to the abdomen, and the food should be reduced to a minimum and be of the blandest character. Hemorrhage from the bowels is an alarming complication, but not often fatal. Fluid extract ergot is useful, or five grain doses lead acetate for two or three doses will generally give very good results in treating hemorrhage.

One of the important parts of treatment is diet, a diet that will sustain life and give the bowels as little work as possible. I give freely of ice cream,

it is gratefully received and I have never seen any bad results from the use of it, but on the contrary it does good, it is well borne, and I have thought at times that it modified the disease; it should be home made, of plenty of rich cream and raw eggs, feed in small quantities and often, varying the flavor to suit the patient's taste.

Milk given in small quanities, and ice cold, if grateful to the patient, broths of all kinds without grease. Iced buttermilk with plenty of sugar in, is just the right thing, with some patients, as they will take and enjoy that when they will take nothing else. Soft poached eggs are sometimes very grateful, beef tea with some is all right.

I like a high degree of nourishment, with as little irritating material as possible. Whatever you give in the line of food, give it regularly.

I cannot say too strongly to disinfect, often and everything, especially the excretions of the patient, use plenty of carbolic acid and bury the excretions as soon as made. I assure you that you cannot be too careful or disinfect too much.

Give positive instructions as to ventilation, and allow no one but the nurse in the room with the patient.

I cannot give in detail everything I would use and do in a given case of typhoid fever, but the above is an outline of my treatment. I do not claim to have made any new discoveries, but do think my per cent of mortality as low as any one else in this section of the country.

Dr. Billings says, in N. Y. Medical Journal, that the diazo-reaction is more constantly present in typhoid fever than the Widal reaction and is present forty-eight hours earlier than the Widal reaction. It disappears earlier and negative results later than the second week are of little or no value.

ALSTRONIA AND SABBATIA.

By J. A. Burnett, M. D., Brawley, Arkansas.

Alstronia constricta—bitter bark, Australian fever bark—is a small tree native of Australia. The bark of this shrub is the part used, is intensely bitter, of a yellowish-brown color and contains alstonin a crystalline alkaloid, $C_{21}H_{20}N_2O_4$, but lacks the astringent qualities of cinchona hence is more especially indicated when the secretions are not free and when the skin is dry while cinchona and its salts are more especially indicated in opposite conditions. It warms up the circulation strengthens the nervous system, influences digestion and secretory functions, and is valuable in malaria, typhoid fever, dropsy, atonic, depressed and septic condltions. It is a stimulating tonic hepatic nervine and somewhat antiperiodic. Dose of the powered bark, one-half to two grains.

Alstonia scholaris—dita bark—is a stately forest tree native of the Philippine Islands. The bark is the part used and is of a yellowish-brown color, inodorous and has a slightly bitter taste. Its action is somewhat similar to alstonia constricta, being a general tonic of a rather stimulating class and is anti-malarial, a reliable nerve tonic and has been used successfully in diarrhea, dysentery and cholera. Dose of the fluid extract, one to four drops.

Sabbatia angularis—American centaury—is an annual or biennial herbaceous plant native of the middle and southern states. This herb should be gathered while in bloom and carefully dried. It is mildly stimulating and decidedly tonic, exerting its chief power upon the stomach and gall-ducts resembling the action of gentain very much but milder. It has been employed as a prophylactic and remedy in intermittent and remittent fevers

and is preferred by some to quinine and should be used when cinchona and its salts cannot be endured. It is useful as a tonic in slow convalescence in dyspepsia especially in old cases where there is lack of tone in the stomach and debilitating diseases in general. A warm infusion of this agent wlll promote the menstrual function when delayed from weakness and it is very beneficial when combined with caulophyllum thalictroides for female weakness and prolapsus uteri. It is one of the best appetizers and sustainers of the nervous system. As a substitute for it Dr. W. H. Cook used columbo one part and scutellaria three parts. Dose of the fluid extract one-half of one drachm every three hours.

Sabbatia campestris is a native of the United States and is a valuable tonic in general debility or during convalescence form fevers, antiperiodic and preventive of miasmatic fevers, excellent in sick headache probably from its invigorating influence upon the stomach and gall-ducts as all of these agents and many others of the gentians have relaxing properties which acts on the gall-ducts thereby cleansing the liver and removing biliousness. Dose of the fluid extract one-fourth to one fluid drachm.

Sabbatia elliottii—quinine flower—is a native of the southern part of the United States. It is a tonic as it belongs to a family distinguished for tonic properties and sustains the gentain reputation. A febrifuge and as an antiperiodic in malarial deseases it is worthy of consideration, having established such reputation in the South during the civil war when quinine was very scarce. Its action resembles cinchona and in large doses it will produce tinnitus aurium. Dose of the fluid extract one-half to one drachm.

Strychnine stimulates appetite, digestion and metabolism.

PHYSIOLOGY AND PSYCHOLOGY.

By Herman Gasser, M. D., Platteville, Wis.

From the reviews and questions asked of "the circulation in the nervous system" it appears to me that the most obscure and incomprehensible problem is: "What is it that circulates?" In a great variety of ways at different times I have endeavored to illustrate this by examples in practical experience, and which caused me to believe that on this point there could be no question, as it is purely a problem of physical or physiological function in which the nervous energy is a special but related part of all the special forms of energy or functions in the body. Nervous energy differs from the energy of the function of the lungs as it does from the blood, stomach and liver. It is purely a physical force in the living economy of our bodily functions all subject to the same laws. Nervous energy differs from light, heat and electricity only in kind and degree as a specialized and organized expression; all related parts of the same unity of energy with its variations of functional relations; all specialized forms of force in the unity of system of force.

We cannot conceive the physiological functions of life without the thought that every part of it is in continuous contact with and nourished by the blood with its system of local special reactions. It is not the circulation of the blood that is life. The circulation of the blood is only a system in the related unity of system we call life. Likewise, we cannot conceive of life with its system of related functions without the thought that every part of it is in continuous contact with, adjusted and related into the unity of its expression by the circulating functional energy of the nervous system.

Indeed, without a circulation in the nervous system the unity of life would be impossible. The circulation of the blood would be an impossible state of existence without a circulation in the nervous system to direct, adjust and regulate it. If the circulation of the blood is true, then the circulation of the nervous system is even a greater and more demonstrative truth, for we cannot conceive, much less understand, the circulation of the blood without it.

It is a curious and interesting fact that the early physiologists before the advent of Harvey interpreted the local physiological functions of the body and the blood very much after the same method and system that physiologists, neurologists and psychologists interpret the local sensory and motor functions of the nervous system into its special and specific entities; even worse by formulating the idea or theory that the individual nerve cells are dynamic entities, isolated and alone, to receive and transmit nervous energy in spasms, with the system of repletion and depletion the measure of their function. Of all the theories, physiological and physical, past and present, this is the most incomplete and undemonstrable, negatived by the general principles of universal existence. If the world is a lawful unity of related system, if life is a continuous unity of related function, it cannot be true. The very thought that the continuous physiological functions of life like the heart, blood, lungs, liver and kidneys is in itself a demonstration of the continuous function of the nervous system that correlates them into the related unity of life. The thought that the special neurons, or even the local systems of sensory neurons shoot into the field of the system and unity of life and mind as special entities of being is so crude, unscientific, unphysiological and unphilosophical, that the great wonder is why and how it has become so generally accepted. The only explanation for it is the confused and chaotic knowledge we have of the physiological function of the nervous system and the still more incomplete system of psychology, whereby it has been launched into this monumental error, and which the continuous circulation of nervous energy in nerves at once unfolds and elucidates. The greatest physical truth in the world is the circulation in the nervous system, for it unfolds and reveals more of the phenomena of the world and life.

As the blood taken up by the veins from all parts of the body and carried to the heart is the same blood transmitted from the heart by the arteries through the capillaries, with only the specific reactions or local functions it has undergone so, also, is nervous energy. The ingoing nervous energy is not sensory energy as an entity any more than outgoing nervous energy is volition. In every part of its circuit it is only a specialized form of physical nervous energy. In this circuit of nervous energy, however, there comes into the field the unity of its related functional product we know as sensations and volitions with all their variations, and what is still more interesting, these sensations and volitions experienced have their real origin, reaction and result in the local parts of our bodily functions. Let us state this physical fact in experience from another point of view.

The blood that goes in on one side of the heart, lungs, liver, kidneys, muscles and glands is somewhat changed from the blood that goes out on the other side, but it is blood still with its system and unity of related function. The blood from one part is the unit of blood; blood is a complex system; the blood that comes out of the kidney is no better than the blood that goes in. We have almost an exact fac-simile in the circulating energy

of the nervous system, only it is much more involved and complex in its system. As the local reactions or functions of the blood in all the organs of the body is always and invariably the complex system of blood, so is every local manifestation of what we call sensory and motor nervous function, purely physical nervous energy in the system of nervous energy, and as in no part of the system of the blood we can say this is the unit of blood, so in no part of the nervous energy can we say this is the unit of nervous energy. In each it is purely a system of related physics; nevertheless there is a great distinction between them. The local function of the blood is always blood with its system, but the local function of nervous energy, while a part of the general system of nervous energy, comes into the field as a related unity of the ever present system of activity in the functional product of feeling, mind and consciousness by which the physical system of function becomes known to us. This is the distinction between the system of the blood and the system of nervous energy, but what is again remarkable, we are as familiar with and know as much about the physical system of the one as the other in the system of our feeling or mind. What then is the relation between the system of mind and the system of physics?

In this comparison between the circulation of the blood and the circulating energy in the nervous system, we here conceive the nervous energy as circulating through the nervous system in exactly the same sense as the blood through its system. The heart and blood vessels are the instruments through which the blood performs its physiological functions upon all the tissues of the body. This is equally as true in the nervous. It is not the nervous system that performs, creates or is nervous function, but the nervous energy through it. Physically or scientifically nervous energy may be conceived as a fluid; it is only a difference of degree of density or elasticity of energy between the blood and nerve force. The nervous system is only the instrument whereby the nervous energy reacts or performs its function upon all the tissues of the body. All physiologists and psychologists past and present believed the nervous tissue is the real cause of nervous function, while in truth it is only the instrument, and is why both are floundering in doubt and confusion, are without system and order.

It is only necessary to briefly state the general principles of experience or thought to unfold the truth that it is not the nervous tissue, but the nervous energy through the tissue, whereby its physiological function is performed. The heart and blood vessels no more create the blood than the nervous system nervous energy. The nervous energy is as much a product of reaction upon all the living functions within the body and the forces without, as the blood. Indeed, the thought that a special nerve or ganglion can generate nervous energy, is as impossible of conception as that the blood can generate oxygen or pabulum without air and food through its special systems of work. Nervous energy is no more the nervous system than the blood the blood vessels or urea a kidney.

With this thought once fully comprehended it will readily be appreciated there are no more "special sensory areas" in the nervous system than there are "special blood areas", but all related parts of the unity of physical or physiological functions, the concensus of which we call life as it becomes unfolded and known to us in feeling, with all its system of variations and relations, from the simple reflex action to the highest flights of ideal scientific imagination. At once you ask: How? Having cleared away

the underbrush, removed the fallen and decaying timbers by demonstrating it is not the nervous system that performs the unity of living functions, that in reality and truth it is only the instrument to organize, transmit and convey the nervous energy into a related unity or system of equilibrium, we are forced to the conclusion that this unity of nervous energy is the measure of our life; indeed is the only life we know in the system of its equilibrium which all experience demonstrates is the system of our feeling, our ideas. There are no "local sense areas" in the brain or nervous system; they are only highly organized and specialized systems of physical function, the specific energy of which is transmitted as nervous energy with system of relation with all the other special functions of the nervous system whereby it becomes known. It is not the special function of the eye, ear, stomach or liver that is a special sensation, for it only becomes known to us as a sensation in the product of its unity of relation in its adjustment with all the special functions.

The function of the nervous system is always physical; it knows neither sensation nor volition, for every local function is a related and interdependent part of all the physical functions that only become known to us in the unity of their relation as interpreted in the ever-present idea, ever-present system of equilibrium. It is the ever-present unity of the varied functions of the nervous energy through the nervous system, with its special activities, that is the measure of their relation and work. There is no relation in unity until it becomes known in the unity of relation. It is here we confound terms. We say the world is a unity of physical relation and system with its "iron law", while the truth is, it is a unity with its system of related work that is, and can only be known in the unity, as it is the measure or relation of the world's work. The world's work is not the idea, system of related unity; the idea is the system of this world's work. It has been a long and tedious work for mankind to reach this simple and immortal system of truth, but when it once becomes fully appreciated and comprehended will work on with an accelerated and unprecedented speed, that will be the marvel of all ages and time.

It is now several years since the circulation of nervous energy in the nervous system became unfolded to me, and I believe I have demonstrated beyond all possibility of question and doubt, have had some conception of what it means in the system of the world's work with all its relations, but the longer I sit by its fireside, the more familiar I become with it, the greater the world system of revelation after revelation as an unending, everlasting and immortal system of work, with beauty after beauty, glory after glory, system after system, ever fresh and green upon the horizon to inspire us on and on. Since the circulation of nervous energy in the nervous system has taken possession of me, the entire world of my science, religion and philosophy has undergone a radical change; a new world has come into the field, the system of which is so inspiring, full of good and hope for the greatest welfare of all mankind, that my great and all-consuming thought is, the rest may undergo the changes with as little friction, as regular and gradual a system. Before leaving our simple homes we should first be assured of having built a greater, larger and roomier one upon an enduring foundation. The transition from the one to the other means painstaking, systematic and continuous work. But while the road is long, the changes radical if not revolutionary, in no part is it destructive or disintegrating, always constructive, creative and ennobling. By making the world idea

with its system of economy or work more we make the life of man ever more enduring, systematic and economical in the system of the world economy. This is the message which the circulation in the nervous system carries to unfold the world system of truth, the world idea with its system of creative economy or work.

It should here appear clear and self-evidenced that the system of forces without is the system of feeling or mind within; indeed that the system of feeling in the end, and after all, is the only system we know. The system of nervous energy, as well as the system of the blood, is purely a physical system known to us in the system of psychics. With this general conception it must at once become clear and apparent that there are not, neither can there be, local sensations and volitions, for they are only special physical functions in the related system of physics, while sensations and volitions are special and local psychics in the system of psychics. The local physical function in the general system of physics is only known and becomes familiar to us in the general system of psychics. The world of psychics is the ever-present measure of the world of physics. Psychics is the world idea with its system of physics.

Again, it should be clear that there are no local centres of sensations or volitions, for these highly organized local physical organs are only related parts of the physical unity of system that do not become known as such until they become adjusted and related into the psychical unity of system, the ever present world idea. The world idea or world system of psychics is only possible because there is a systematic, continuous and endless circulation of nervous energy in the nervous system that reacts upon all the forces of the world with system, carries them centrally wherein they become adjusted into a unity of relation, and this product of the unity of relation is the system of the world idea. The physical system of the world is the psychical world system. Physics is not psychics, but psychics is physics; as physics is a system of force, psychics is the force of system, for system is an idea. Nature or the physical world system is only a physical system that becomes known to us in the system of the world idea. The world of psychics or the world idea is the only world we know. It is because the world idea is a system that there is a system of nature, and if it appears that we know more of the system of nature than the system of the world idea, it is because the world idea works through the world system, and as we become first acquainted and familiar with the world system out of which we are created in our idea of the world it naturally and instinctively is the first to become organized and established into system. We must first learn the system out of which we were born before we can understand and comprehend the idea of the system. As the system of the world idea works through the system of the world, and the system of the world up to our idea of it, the world idea with its system must naturally be the last and greatest product to be unfolded to us. The system of the world is not an idea, only a system; the world idea is the world system, the only world we know. The world idea is the world system of force, the world unity of force the force of the world idea.

With this idea of the function of the nervous system and the generally formulated conception that makes this hypothetical distinction between the physical system of nature and the psychical system, but both related and inter-dependent parts of the same world unity of system, the thought at once suggests itself: Where does the physical system end and the system of

psychics begin. Modern physiology, as well as psychology has no hesitation in stating that sensation centres are distinct and separate from idea centres. That sensations are the raw material out of which ideas are born. That ideas are the result of the adjustment of many and widely scattered cortical sensations. In the light of our present knowledge of the physiology and psychology of the nervous system this general conception is systematic, mostly true, still leaves it in confusion and doubt, in each there is a system of related facts, but no law or scientific general idea whereby it is possible to trace them from cause to effect, and effect to cause.

If sensations are local physiological entities. the raw physical material out of which concepts, ideas or psychics are woven, then sensations, per-se, are the connecting links between physiology and psychology. This would force us to the conclusion that the difference between physics and psychics is only the difference of its system of organization, and is the beautiful thought of pantheism, metempsychosis, that is scientific in system, philosophic in conception, but nevertheless is incomplete and lands us in confusion when we begin to interpret the system of relation between physics and psychics It is always impossible to translate our idea of the peanut with system into the peanut, although the peanut is with some degree of system by various routes traced into our idea, and yet we know that somehow they are related and inter-dependent parts of the same system. How then, is it possible to interpret the system of relation between them. To unfold it with system would require a large book, while here we have only a page.

The peanut as well as a man is a system of creative and constructive work in the world. The peanut as well as the man reacts and adjusts itself in unison and harmony with the entire world system, is only a difference of degree; indeed the peanut under certain conditions acts as if it was permeated by an idea in its effort to adjust itself to the local environment for continuance, as a rudiment of the idea as well as the system, but is no more a world idea then a world system, because the one as well as the other not become highly organized and and differentiated enough to react upon the whole with relation in the system of the world. The peanut is highly complex, has the world system intricately organized in its being, its organization or system has a certain definite relation, and if but one of the forces of its acquired life, like sunshine, is denied, will work with greatest effort to attain it at the expense of the whole of its organized economy or system. This is the peanut's idea in the world. If the world idea with its system of the world is true this is not necessarily a peanut idea, for even the peanut with its system of the world struggled to continue in the world idea. To the peanut it was not its physical system of stored up energy, but the unity of its organized functional activity, and as this unity is the idea of its system of forces that impels it on for continuance in the system, even the peanut illustrates and demonstrates that the world is an idea with its system of purposive and creative work.

Creation, evolution, nature or the world is a continuous system of work in our idea. The system of our idea of the world is the world system, and not the world system the world idea. The world system of force is the continuous system of creative work, the world idea the ever-present and only world we know, hence the immortality of the phys cal world is, and must be, the immortality of the psychical world. Our body is an organized physical system in the system of the world

physics; our idea or psychics of the world is an organized system of the world idea or psychics. How did the system of physics become the system of psychics and psychics-physics? Why is the world of psychics greater than the world of physics?

Nature, or the world, is an equilibrium of creative unity. Unity is the physical system of creation. The world system force in unity with unity its purpose and destiny, unity is and must be its primordial being. As unity is the ever-present system of the world idea, the continuous and never-ending system of this physical world, with all its variations of relations in its system, is not, and never can be the world idea. It is all the system of forces organized, woven, focussed and interpreted into a related and ever-present unity that is the world idea. The world idea or psychics is the world; the world system of force with all its variations and relations, from the atom to man, without beginning or end, always a system of work, never the unit of its system, is the distinction. The world is a system of work or force, the world idea is the system. The world idea is the system of the world of force. The world is and always must be an idea, for in the idea alone does it become known and realized. The world idea, or God, is the ever-present world. With this distinction of the world of physics and the world of psychics let us follow our analysis.

(To be continued.)

Dr. F. J. Mann says, in Am. Med.: When breast-milk disagrees or is insufficient in quantity, it will generally be found that the mother is anaemic, constipated, or otherwise in poor health; that she is not receiving a plentiful, plain diet with abundance of fluids, or that she is not getting enough fresh air and exercise. Drugs usually indicated are iron and laxatives.

TREATMENT OF FISTULA.

By Charles C. Miller, M. D., 100 State Street, Chicago, Ill.

We will now consider the treatment of complete fistula involving the deeper tissues. Such a fistula consists of a tract or cavity, which communicates both with the skin surface and the lumen of the bowel. Such a fistula may have any number of openings, and running off from the main tract or cavity may be one or more branch tracts.

Where the examination makes clear the fact that considerable tissue is involved by the process, or where we are uncertain as to the exact extent of the condition, the operation is best performed under general anesthesia. The previous preparation need not be great. The condition of heart and kidneys should be ascertained, the patient should be given an enema and the bowels evacuated, the stomach should be empty and the parts given a preliminary scrubbing. A full bath is always advisable before confining a patient to bed, and frequent sponge baths during such confinement are almost invaribly pleasant as well as beneficial. A complex preliminary routine is as the reader can see unnecessary.

Position for operation will depend upon the location of the fistula and the number of assistants at hand. In the absence of numerous assistants or a special surgical table the lateral prone posture may be chosen in preference to the lithotomy posture.

One never regrets the outlay of considerable labor to secure as nearly aseptic conditions as possible, but one is very likely to regret any discrepancy in this respect upon the supervention of a septic condition. Asepsis may be all sufficient in hospital work but antisepsis will ever be important in out-hospital work. In hospital work I rely upon soap and brush to secure

asepsis of hands and field using antiseptics only to make asepsis doubly certain. In work outside of the hospital I rely upon soap and brush to secure asepsis, but find antiseptics invaluable to insure and maintain asepsis.

Our first step in the operation will be the passage of a grooved director into an external opening of the fistula, directing it along the tract toward the bowel. Our finger is now to be passed into the rectum and the tip of the director searched for. When it is felt and no tissues intervene, it is to be withdrawn from the anus. By this procedure we include the parts between this tract and the body surface upon our director. The parts are now divided by passing a knife along the director. Any spurting vessel can now be caught with hemostats, though, at this stage, but little attention is to be given to hemostasis.

Two overhanging flaps have been formed by this incision, except at the sphincter ani, where the retraction of this muscle widens the wound so that it is trough like at this point. The overhanging flaps will interfere with proper healing, and if they should reunite the fistula would be re-established. With scissors all overhanging edges or flaps are to be trimmed smoothly away. The advisability of little attention to the bleeding at first can now be seen. Had we stopped and checked all hemorrhage some time could have been spent and then no sooner than we had completed our flap trimming, than we would have bleeding from the same vessels as they were re-divided. If a free general bleeding occurs from our flap surfaces, they can be grasped with compresses wrung out in hot water. Hemostats can be snapped on all bleeding points as the flaps are trimmed away.

Bleeding checked, our next step will be a search for any branch tracts of which there may be a number, although in many cases none will exist. A most painstaking search must be made nevertheless and the slightest pocket or bridge of tissue found and split open. We must use our sight, our sense of touch with the finger, and complete the examination by a careful exploration with the probe.

Where branches are found they should be treated, as was the parent tract, splitting it open, and trimming away any overhanging edges, and then carefully searching the parts exposed for other branches.

When all cutting has been completed, we can now commence to remove the hemostats in rotation as they were applied. In most cases no bleeding will follow. Should bleeding follow, tying will be advisable, rather than torsion. Catgut will be best for ligatures. Number one or two can be used. Non-absorable ligatures can be used. They should be cut leaving the ends long, so that they can be easily found. In a few days they shonld be cut or pulled away.

In some cases, a large part of the buttock will be found undermined by the destructive process which has been in action. In such a case, we must trim away the overhanging edges leaving a large open wound. If the floor of the wound is covered with unhealthy tissue, it is to be curetted away.

The division of the spincter ani is a necessary feature of some of the operations. In most cases we will find it necessary to divide only its most external fibers. In some cases the greater number of the fibers will be divided, and in rare instances the fistulous process will extend even above its level and enter the bowel on a higher level than any of its fibers. Such a case presents quite a problem, as to the line of action we should pursue.

If all the fibers of the muscles are divided it is very likely to result in

incontinence of feces. Such a condition is too deplorable to take chances with. It is better to risk the chance of not curing the fistula by not dividing the entire muscle, but to be content with curetting the short portion of the tract above the sphincter and applying some irritant antiseptic to promote granulations and healing.

The division of a larger portion of the sphincter at one point can be done with impunity in most cases. If the muscle is weak, which fact can be ascertained when the finger is inserted into the rectum, then we should be extremely careful as to the injury we inflict to it. Double partial division, at the same time in cases, where there is more than one opening into the bowel, is very likely to cause serious trouble in this respect so that it should not be practiced.

The fistula having been changed into an open wound, we are now to use measures which will facilitate healing. Until granulations have formed at least the wound should be protected from infection by the use of an antiseptic dressing. Iodoform as a powder conjoined with the use of the same agent in gauze will prove satisfactory. Such agents as would tend to destroy healthy granulations should be avoided. The dressings should be changed every twenty-four hours and if there is any quanity of wound secretions present, they should be washed away with a sterile or mildly antiseptic solution.

The patient will be able to be up and about in a few days after the operation. Where a large raw surface has been made considerable time may elapse before granulations fill it and it entirely heals from the edges. During this time the patient can be about and can care for the wound himself in great part. The surgeon should see it at intervals at least so as to see that no healing together of apposing surfaces can re-establish the process.

BRONCHOPNEUMONIA.

By M. G. Price, A. M., M. D., La Follette, Tenn.

We have been having quite an epidemic of measles here and have had much trouble with them. The principal complication that we have had to contend against has been bronchopneumonia.

In my case book I find written over against this malady: A patient with fever, rapid pulse and respiration; large and small moist rales on both sides, so much so that the respiratory murmur can not be heard, has bronchopneumonia.

Treatment. Let the temperature of the room be kept at 75° or 80° and the air well moistened. Mush poultice and cotton jacket applied. Waugh's quinine suppository, grains v to xx, is a life saver. Repeat it every eight hours. Give carbonate of ammonia in fair doses and often. An emetic will rid the patient of accumulating secretions. No heart depressants. Whatever you do don't give morphine or opium. Keep up the strength; coffee for debility, white of egg, bovinine, etc.; for failing respiration warm bath. Use aconitine, veratrine, digitalin, strychnine arsenate, emetin, apomorphine, hyoscyamine as indicated; castor oil daily. A towel wrung out of boiling water as hot as can be borne enveloping the thorax, covered with dry flannel; repeat as needed. If the child threatens to smother give an emetic of apomorphine hypodermically. Dark iodide of lime is well used in this trouble.

✱ ✱ ✱

The following is a good external application for bronchopneumonia:

℞ Oil of mustard, ʒss
Olive oil, q.s. ad., ℥iv
M.

Rundschau.

By H. Speier, M. D., Rochester, Minn.

DECAPSULATION OF THE KIDNEY FOR CHRONIC NEPHRITIS.

Surgical treatment for the cure of chronic Bright's disease has been brought forward about five years ago and at the present time occupies a large share of the attention of medical men. Edebohls of New York claims priority, but in some quarters it is asserted that Ferguson antedates him in the work. It really matters very little, who has the better claim. In the general medical mind the name of Edebohls is associated with the work. He has devoted much study to it, has done the greatest number of the operations and has published several articles regarding it. The Medical Record of March 28, contains his latest paper, a lengthy and complete one, giving the results of his work in this line down to the end of 1902. During the year 1902 he operated on thirty-two cases of chronic Bright's disease by decapsulation of both kidneys at the same sitting, a total experience, with those previously reported, of fifty-one cases. All were in advanced stages of the disease, so that the diagnosis could not be doubtful. The average duration of the disease had been three years and four months. Nearly all presented cardiac and vascular degenerations to a greater or less degree. Edebohls has been fortunate enough to keep in touch with all but three of the fifty-one cases. Fourteen of them died at periods of time varying from twelve hours to eight years after operation, being a mortality rate of 13⅔ per cent. He tries to show that these deaths were inevitable, owing to the stage of the disease and its complications. The precise limit beyond which renal decapsulation can no longer avail to save the patient's life cannot as yet be positively stated. The mortality of the operation is that of the disease itself. In forming an estimate of the final therapeutic results of the new operation only cases of more than seven months' standing were considered. Deducting from them those who died or were lost sight of, 24 remain. In two of them the results were unsatisfactory, ten were radically cured and twelve greatly improved, as shown by disappearance from the urine of albumin and casts, normal output of urea and gain in general health. Most patients returned to their usual vocations within two months after operation. In summing up the author emphasizes two facts, (1) that in its earlier stages chronic Bright's disease is curable or susceptible of amelioration by renal decapsulation, (2) that renal decapsulation is attended with little or no risk to life.

This is, in short, the report of the advocate, the originator, perhaps, of the operation. He himself admits that too short a time has elapsed to draw any final deductions. Certain it is that other surgeons maintain much reserve toward the innovation and the claims made for it and are not enthusiastic over the operation. Few men, besides Edebohls, have been willing to try the treatment. Only the test of time can determine its value.

OSTEOPATHIC VICTORY IN MINNESOTA.

What we predicted in the Rundshau for March has happened, only much sooner than we anticipated. The

legislature of the state of Minnesota passed the bill creatiug a special board of examiners for osteopaths. The injustice of the act is plain to every physician. But it is no use crying over spilled milk. From private information we have learned that in the lower house the bill was greatly prospered, unwillingly, by the speech of a medical member, who in his opposition was foolishly intemperate and thereby made friends for the bill. Just what we have said repeatedly. Make a martyr of the irregular, let the people think he is the under dog in the fight, and you help him every time. When will we learn a little common sense?

BUTTERMILK AS AN INFANT FOOD.

In a former number the Rundshau gave an abstract of an address by Prof. Baginski on the topic and emphasized the fact it was really incompatible with all our previous knowledge and accepted theories, to think of buttermilk as a food for infants. The matter was discussed not long ago by the section on pediatrics of the New York Academy of Medicine. Not much enthusiasm was shown regarding the use of buttermilk. A well known authority on children's diseases, Dr. J. E. Winters, voiced the objections in a few terse words. He characterized buttermilk as food for infants as being thoroughly unphysiological. That it was unphysiological, he continued, needed no extended argument, or else nature had grieviously erred, when she had put 4 per cent. of fat in human milk. It was well to note at the outset, that all the babies treated with this buttermilk food had been previously made ill by physicians who had ignored physiology in the food prescribed for these infants. That the infants improved temporarily on the buttermilk food was not surprising, when one considers that the food that had originally made them ill had been stopped and they were given better care. He did not hesitate to say that any physician, who would go into an intelligent family and recommend as an infant food a mixture of sour milk, flour and cane sugar, would be pretty sure to lose that family.

All participants in the discussion spoke of the difficulty of obtaining a good kind of buttermilk.

Still, there can be no doubt that good results have followed the use of buttermilk in European countries and for many years. Reliable observers vouch for it. It seems a food most applicable for certain cases, such as fermentative diarrhea, fatty diarrhea and intestinal disorders, after the acute stage has passed.

During the coming summer opportunities will offer for trial of buttermilk as an infant food and then reports will be made which will settle the matter for us in America.

CANCER OF THE STOMACH A SURGICAL DISEASE.

Dr. W. J. Mayo, of Rochester, Minn., read before the last meeting of the New York State Medical Association a paper on the Radical Cure of Cancer of the Stomach. In conclusion, he said, let us put this question to the practitioner of medicine: Can you cure a case of cancer of the stomach; if not, why withhold the only means of effecting a cure—a surgical operation? Again, let us ask: Can you diagnosticate cancer of the stomach early enough for surgical relief; if not, why withhold an exploration—the only certain means of diagnosis?

What is the answer of the physicians?

* * *

Eupatorium, or common boneset, is valuable in many disorders of the stomach; recently it has been highly recommended in intractable hiccough.

DISCUSSIONS.

This Department contains each month case reports, letters, inquiries and replies from our readers. If you have a case you would like some help with, or a question to ask, write to us and we will publish it in this Department and you will get the opinions of our medical brethren. When you have an interesting case, write a report of it and send it in and it will help some one else. We need each other's counsel so let us help each other from our experiences. Letters are desired from physicians on any subject pertaining to our profession.

A SOUTHERN DOCTOR'S EXPERIENCE.

I had consumption myself and of course I know something about it. While in North Georgia I was a great sufferer from a cough which proved to be phthisis pulmonalis, or said to be by some of the best M. D's. in that country 20 years ago.

I became alarmed at my condition and went to a town where there were six or eight doctors and we got five of them together and I pulled off my coat and shirt and asked them to give me an honest examination, which they did and worked hard for an hour, or two, to come to the conclusion that I had consumption, and could not be alive six months. The facts were communicated to me by my old friend Dr. B. He stated that it was so sad for a young man with so much promise and bright professional prospects before him as I to pass away so early in life and leave so many friends that would need my services and medicine.

"Doctor" said I "it will take a six feet and six inch coffin for me and as they are a little scarce I am going to keep my boots on until I need it, and if my old horse holds out I will be on him at the end of six months and a year too. Unless that blue-eyed girl down at R. goes back on me and I hang myself for being a fool or a donkey."

I shook hands with the learned gentlemen and went home a very sad young doctor. There was a call or two for me when I arrived at my boarding place and I went to work with a determination to work out my professional salvation without much trembling, but not without fear. I soon learned that by taking frequent deep breaths I could avert a coughing spell and in six months I had gained twenty pounds and had no cough at all. It would be unjust to say that those doctors were mistaken in their diagnosis or prognosis either, though I am much alive and Mrs. T. says that she is glad sometimes that I didn't die, because I am a pretty good doctor for other men's wives and children if I do neglect my own. And I want to make one assertion now while my wife is not looking over my shoulder.

I believe there are hundreds of people die of tuberculosis that could live twenty, thirty, and forty years longer by deep inhalations, three times daily, and spend two to four hours in open air every day, and eating such food as they could digest and leave off the indigestibles.

Another thing I learned was that many physicians fail to look after the renal secretions of their patients.

One little fellow was brought to me that had been to two older doctors and after making all the inquiries possible I decided the baby had had everything except a diuretic, so I put him on one, and he improved from the beginning. I soon found that to "meet the indications" I would have to treat the stomach and kidneys of nearly all the little fellows. So I soon was called, "the baby doctor."

Just say to all "ye young doctors" that to be the "baby doctor" makes you the family physician soon. I had one little patient that was nearly two years old that could not walk and had taken enough calomel, cough syrup, paregoric, castor oil, soothing syrup, bromides, etc., to have supplied a very large family for five or ten years. I put him on

℞ Spirits nitros etheris, gtts. v
Specif. apis, gtts $\frac{1}{5}$
Specif. nux vomica, gtts. j
Infusion buchu, leaves, gtts. v
M. At one dose, to be repeated four times daily.

He was soon walking and grew to be a fat healthy child. His mother told me that "old Mrs. Jackson had come over nine mornings in succession and brushed the bottoms of his feet nine times each morning, and he walked the tenth morning." So you see I had not earned my fees at all, in the eyes of that fond, intelligent and loving mother, but the husband and father reluctantly brought me some corn at double the market price, but I was glad to get it at any price from him.

I fully agree with Dr. Giltner in January Recorder, in his assertion about doctors advertising proprietary medicines, and I know of some drug habits caused by those remedies. I know one doctor who owns his drug store and when he gets a lot of female tonic, consumption cure, liver lifter or rheumatic rouster on hand that does not sell fast enough, he prescribes it and has his druggist put it in an ℞ bottle. I also see too many ads. in journals of doctors wanting to sell some special remedy. They know that we country doctors are not well up on such diseases as piles, constipation, enuresis, catarrh, jaundice, "liver complaint" etc.

F. G. Thomason, M. D.
Kissimmee, Florida.

QUACKS.

Words like those of Dr. Speier on page 74 of the Recorder will almost surely be quoted as capital by some quack. The best way to rid the field of scorpions is stamp upon them when we can. The quack may have much or little education, that does not change the aspect of his case. He enters the medical market as a thief and with the craftiness of the three card monte man.

He steps before the public with a mouth full of brag. Men like Dr. S. do him too much honor.

The writer has lived long in the sage brush and knows but little of society's ways, but one thing is certain he would not notice a quack upon the street or elsewhere. As to legislating against them I say legislate all possible and when that fails do not fear to speak or act for fear that the public will say somebody is being persecuted. As for the "success" that quacks meet with in their practice we can point to many a fine piece of work performed by malefactors. As for the osteopath he may be a master of massage and suggestion and with those work cures in a class of cases. In one town where I used to practice, an osteopath became quite popular among the women. This was quite natural as I used to frequently remark "some very estimable ladies no doubt cannot find the manipulation they crave elsewhere. It rejuvinates them—this osteopath knows his business." Respectable physicians want no baits to catch the public. The public will play with the osteopath for a time and then throw away the boy a little worse off for its folly and fun.

The medical profession has a duty to perform to protect the public from these imposters and fanatics, but the doctor in the end will come out no poorer by the burning the public gets in its foul play with osteopathy, christian science, new thought, magnetic healing and all the nonsense. If any good is done it was like the price given in the "nickle in the slot" machine. Fake and folly seem to have a part to play in this world and doubtless they will endure until the millennium but they will never triumph over intrinsic value and sound sense.

C. E. Boynton, B. S., M. D.
Los Banos, California.

The Wisconsin Medical Recorder.

A Monthly Journal of Medicine and Surgery, devoted to the best interests of the whole profession.

J. P. THORNE, M. D., Editor and Publisher, Janesville, Wis.

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Original Articles are solicited from our readers. We wish articles which are sent us to be contributed exclusively to this magazine. We will send the writer of any original article, if desired, twenty-five extra copies of the number containing the article. We are also willing to send copies to the professional friends of the author.

Letters, Case Reports and **Questions** are desired for our Discussion Department.

Society news and reports and items of interest are gladly received.

Vol. 6. MAY, 1903. No. 5.

EDITORIAL NOTES.

You doubtless enjoy the original contributions of the Recorder. Others would enjoy just as much reading something from your pen. An original article, a case report or anything interesting or helpful will be appreciated. If more articles are sent than the Recorder will hold we will add more pages to the magazine so as to take care of them. In sending us articles please send them exclusively to the Recorder, as we do not want articles which are contributed also to other journals. The original character of the Recorder has contributed largely to its success. Each year we have made the Recorder a little better and larger than the pceceding year and we intend to continue this. We have on hand for early publication some unusually good articles.

Dr. Ferd C. Valentine read a paper on "The Boy Venereal Peril," which should be widely read. A vast amount of good would result if the following bit of wisdom given by Dr. Valentine could be read at every gathering of young men in the land:

"If you want to be a healthy, strong, successful man; if you want to live a happy life, do not smoke, do not drink alcoholic beverages, do not associate with corrupt people, and do not indulge in any vices. If you have been so unfortunate as to lose your health for any of the above reasons do not take the advice of an advertiser, do not take advertised drugs, but consult your physician."

Cleanliness is the first step in education as well as in civilization. A few days ago Booker Washington gave an address before a Chicago woman's club on "The Tooth Brush as a Factor in Civilization." He said among other things: "I preach the gospel of the tooth brush. You can't civilize without it. I don't care how poor a man is, when he comes to Tuskegee he is required to purchase a tooth brush. If we can improve the industrial civilization of my people, a moral uplifting will go with it. We must teach my race the details of living. We must teach it how to eat, how to sleep, and how to spend money."

We continue to have requests from new subscribers for the back numbers of the Recorder for this year but we are unable to supply the numbers. The many new subscribers have exhausted our supply of back issues.

Every subscriber to the Recorder gets one thousand labels as a premium. If your subscription has expired send along your renewal and we will give you the premium labels.

ALKALOIDAL THERAPEUTICS

Original articles, reports and notes on dosimetry are desired for this Department.

INTESTINAL ANTISEPTICS.

By W. P. Hough, M. D., Columbia, Louisiana.

I was recently called to a case, a young man who a year ago had a severe attack of typhoid fever. The history of the case was that he had never regained his former strength after his attack of typhoid. His digestive powers were so weakened that he had to exercise great caution in his diet, otherwise he would suffer with distress throughout his entire digestive tube. Finally a diarrhea set in, which became chronic and which he was suffering with when I saw him. His stomach and bowels were much distended with gas; temperature, 100° F.; he was considerably emaciated and very weak, suffering from headache, pains in back and muscles generally.

My conclusions were that the glands of Peyer and Lieberkuhn had never regained their normal state, but remained more or less ulcerated and inflamed, and the entire digestive system very much weakened.

Treatment. Calomel $\frac{1}{6}$ grain was given every hour till six doses were given, followed by a dose of rochelle salts. Then I followed with the most potent of all intestinal antiseptics, the triple sulphocarbolates, zinc, lime and soda, a 5 grain tablet (Abbott Co.'s), every two hours in a third of a glass of warm water. To improve the digestion I gave a full dose of lactopeptine powder in wine glass of sweet milk after eating. The result was almost magical. All gaseous swelling disappeared as usual under the sulphocarbolates, the stools becoming odorless on second day, the lactopeptine digesting all food relieved him of the heaviness and distress of indigestion. The sulphocarbolates healed the chronically inflamed and ulcerated glands of the small intestine. I subsequently prescribed a tonic of freshly prepared strong nitromuriatic acid, 4 drops to dose, with P. D. & Co.'s scale pepsin, given in one-third glass of water ten minutes after meals. This case progressed rapidly to complete recovery after having suffered a year, receiving treatment from several physicians without benefit. I report this case simply to direct physicians to the best of all intestinal antiseptics in various forms of digestive troubles.

A DIFFICULT CASE.

By C. E. Boynton, M. D., Los Banos, California.

The hardest case I ever encountered was the following: An infant with ravenous appetite and rapidly growing, could not nurse without vomiting half of the milk taken, milk being always sweet when vomited. The mother was in fine condition, in fact gaining in weight, furnished all the milk required, which seemed to be of good quality. Lime water had no effect. The child was furnished water to drink very few hours. Was for one while nursed every two hours, then every hour and a half, and even every hour, but the vomiting was the same at every nursing—half of the milk came back. It mattered not if band was tight or loose. The child was in every respect normal.

Medical literature upon this subject is not very extensive. The case is not serious, either to the mother or child, but is tantalizing to the doctor in as much as medical skill, he is forced to admit, knows no cure. Waugh's anodyne helped the case a little. Can Recorder readers offer anything on the subject?

THE DOCTORS' LIBRARY

This Department contains each month reviews of the latest and best books. Items of book news will keep readers informed on progress in the world of medical literaure.

BIOGRAPHIC CLINICS. — The Origin of the Ill-health of De Quincey, Carlyle, Darwin, Huxley and Browning. By George M. Gould, M. D., Author of an Illustrated Dictionary of Medicine, Biology, Etc.," "Borderland Studies," etc. Pages 223. Extra Cloth, $1.00. P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia.

This work is something entirely new and unique in book-making. In introducing the subject the author states that each individual has a clinical life-problem pertaining to the diseases, disabilities and entire career of the life. In this volume is given the pathologic life-study of five of the greatest geniuses of England. It is written from the standpoint of the ophthalmologist and shows that the ills of these men were dependent on eye-strain. If these men had been relieved of their bodily ills, there is no telling how much more brilliant would have been their careers. One chapter is devoted to "biliousness" and headache, showing how frequently these conditions are symptomatic of eye-strain. "Some Neglected Points in the Physiology of Vision" is the title of an interesting chapter, while another is devoted to a discussion of the "Discovery of Astigmatism and Eye-Strain." The ophthalmologist will find the book confirms the truths regarding eye-strain which he observes in his own practice, the general practitioner will find it presents these truths in a clear and convincing manner and all will find it a delightfully entertaining volume. The book is prettily printed and bound, with gilt top. It has a frontispiece portrait of De Quincey.

BOOK NOTES.

Success for May is a number of interest to everyone. We call attention to a few features of the magazine: "The Industry that Cooks the World's Breakfast," by Frank Fayant, tells all about the health food industry. Thomas Wentworth Higginson, contributes an article on "The Emerson Centenary." A profusely illustrated and entertaining article is "The Way Wild Animals Are Trained," by J. Herbert Welch. There are many other good articles, plenty of good fiction and many helpful suggestions in the magazine.

Suggestion for May contains, among other things, "Thirty-five Years of Constipation," by Herbert A. Parkyn, M. D.; "The Annular Theory," by Prof. Isaac N. Vail; "Suggestion in Education," by Newton N. Riddell; "No Magnetism in Human Beings," by Dr, Paul Edwards; "The Mission of Skepticism," by Mary Frazee. Suggestion is a very original magazine devoted to the scientific discussion of suggestive therapeutics in all its phases and to the natural laws underlying all forms of occultism. Sample copy may by obtained by writing to 4070 Drexel Boulevard, Chicago.

The June issue of the International Medical Magazine will be devoted to a symposium on the most important gastric subject of hyperchlorhydia, a symposium, than which none more important has ever been published in any American journal. More than half a dozen of the leading European specialists will contribute, among whom are, Prof. C. A. Ewald, of Berlin; Prof. George Hayem, of Paris; Prof. Carl von Noorden, of Frankford; Prof. L. Kuttner, of Berlin; Prof. Rosenheim, of Berlin. The selection of contributors from this side of the Atlantic has been equally happy, including leading American specialists.

The Medical Critic has just issued an Index Medicus for 1902. It contains 268 pages and indexes the leading articles of the world's medical literature for 1902. A complete list of the medical journals is presented, giving the names of editor and publisher, circulation, price, etc., of each journal. It has required much enterprise to produce this work, which the profession should appreciate. The present publication of this index is especially opportune, as there is considerable doubt about the proposed resurrection of the old Index Medicus. Those interested can procure a copy of the publishers at 154 East 72d St , New York.

The May number of the Household has a charming Memorial day story, by Flora Haines Loughead, entitled, "The Ship that Made Port," and Frank Walcott Hutt has a fine poetic tribute to our soldier dead. Of an unusual Memorial day sort is the article by Hezekiah Butterworth, entitled, "In the Pilgrim Country," in which the writer emphasizes the need of another day to commemorate those devoted souls whose enterprise made this country possible. The article is magnificently illustrated with photographs. Another noteworthy illustrated paper in the number is written by W. C. R. Hazard, of the United States postoffice department, on the rural free delivery system. Other good articles, short stories, pictures and the departments make up a good number of this family journal.

The May McClure's is notable for both the quality and number of its illustrations. Jules Guerin's two full page views of Pittsburg, by night and by day, admirably illustrate Lincoln Steffen's paper on "Pittsburg: A City Ashamed," a companion piece of his St. Louis and Minneapolis papers. Then there are some very telling drawings by Henri Lanos, reproduced in tint to illustrate Professor Simon Newcomb's capital story, "The End of the World." Ernest Poole's "Waifs of the Street" is lavishly illustrated by many types of street urchins, drawn by Schoonover. George Varian illustrates Miss Tarbell's "Standard Oil" paper, and Corwin K. Linson a story by Mary E. Wilkins. Garth Jones, the English artist, gives a excellent specimen of his hand work in line of his illustrations for Herminie Templeton's Irish story. This is by long odds the best appearing number of McClure's ever issued.

Lippincott's Magazine keeps up its reputation for publishing a strong, bright novel each month by presenting in the May number one of even more than usual interest by George Gibbs. This is called "The Love of Monsieur," and, as the title implies, it is Frency, with a hero who is "a damon for success with petticoats". His last love is a fetching conception, well worth the quarrels she provokes. With Mr. Gibb's grace in writing and an extraordinarily fine plot there is left nothing to be desired in this very fascinating tale. Readers have come to look with eagerness for Ella Middleton Tybout's darky parable sketches. "Ananias of Poketown" will not disappoint those who seek amusement, and Miss Tybout has a gift for writing dialect which makes it as easy to read as "rolling off a log". Other notable short stories are contributed by Seumas MacManus, Cy Warman, Cllfford Howard, Montgomery B. Corse, Jerome Case Bull and Francis Lynde. A lovely nature sketch suited to the month is by Dr. Charles C. Abbott, entitled, "I Go A-Maying." "Five Poems of the Spring," by Bliss Carman, sympathetic and charming, lead the list of verse in the May number, followed by other good contributions.

THE DOCTORS' WORLD.

Therapeutic Briefs, Medical News Items, and Clinical Notes on Medicine and Surgery.

Lysol in Cancer.—Several clinicians have recently reported beneficial results in cases of cancer from the internal administration of lysol. Behla has reported improvement in two cases of cancer of the cervix uteri from 15 drops in milk, four times daily. He begins with 10 drop doses and increases it in some cases to 25 drops. Southwick has observed beneficial effects in several cases. It is possible this may prove a valuable therapeutic measure.

Navy Medical Corps.—The fifty-seventh congress in its last session provided for an increase of 150 numbers in the medical corps of the navy, 25 of which are to be appointed each calendar year for six years. By the enactment of this law there is afforded to the young physicians of the country an opportunity to take service in the navy of the United States and an assurance of the continuance of this opportunity for the next six years. The number of vacancies in this corps occurring from retirements, resignations and casualties averages about ten a year, which, added to the 25 created by new legislation, makes 35 appointments open to ambitious young medical men yearly.

These appointments are to be made in the grade of assistant surgeon and are within the reach of any well-qualified physician between the ages of 21 and 30 who is a citizen of the United States. Examinations to determine the fitness of candidates for appointment are held in Washington, D. C., and at Mare Island, Cal., and the boards of examiners are in continuous session throughout the year. It is only necessary for any physician of the required age and citizenship desiring to enter the medical corps or the navy to apply to the secretary of the navy for permission to be examined to insure being given an opportunity. No political or other influence is required, and the only testimonials needed are those bearing on moral standing and citizenship.

The examinations to determine the fitness of candidates for these appointments are conducted in the following order: 1, physical; 2, professional; 3, collateral.

Administration of Anesthetics.—The proper production of general anesthesia is one of the important matters of practice, but how often is the subject dismissed as too trivial for careful consideration. The preparation for the anesthetic and its careful administration require tact and skill. Proper suggestion before commencing the anesthetic results in quicker and better results. The patient should be told that he will be carefully handled and need not have fear; he should be told that at first the sensation may be a little unpleasant but that must be expected; he should be instructed to take full, regular breaths. A little preliminary talk like this inspires the patient's confidence and accustoms him to the anesthetist's voice, so that later orders are observed. Fear is a more important factor in causing trouble with anesthetics than is generally considered. We have just read two excellent articles on anesthesia which present similar ideas, one article by J. A. Bodine, M. D., professor of surgery at the New York Polyclinic, and the other by W. J. McCardie, B. A.,

M. B., B. C. Cantab., anesthetist to the General Hospital, Birmingham, Eng.

Dr. Bodine's article is in the last issue of International Clinics. Among other things Dr. Bodine says: "I am firmly of the opinion myself that patients who die in the primary stage of chloroform anesthesia really die from fright. It must be remembered that most people who die from chloroform, die at the very beginning of the administration of the anesthetic, at a time when usually considerably less than a drachm of the drug has been inhaled. They do not die from the toxic effects of the chloroform. There is some other reason, and this is evidently psychic in character. Deaths from fright, after all, are not very uncommon." He prefers chloroform to ether and gives this reason: "With regard to the use of ether or chloroform as general anesthetics, I personally prefer chloroform. If the deaths from fright that occur during the administration of chloroform were eliminated, then it would be a much safer anesthetic than ether. Where chloroform is an enemy, it is always open and above-board. It kills at once and directly. Ether is an insidious foe. The patient may survive the operation, but dies from irritation of his lungs or of his kidneys ten days after the operation. If I had to choose an anesthetic for myself tomorrow, I should take chloroform, but I should want it administered by a careful anesthetist. Under such circumstances it is doubtful if more than a modicum of deaths that are now reported from chloroform anesthesia would occur."

Dr. McCardie presents a very exhaustive article on the subject of anesthesia, in the Birmingham Medical Review, from which we take the following extracts:

Oliver Wendell Holmes said of anesthesia: "The fierce extremity of suffering has been steeped in the waters of forgetfulness, and the deepest furrow in the knotted brow of agony has been smoothed forever." This fine phrase is true as regards operation itself, but what can we say of the time immediately before operation? We all feel, or ought to realize, that some day we ourselves, as patients, may be perhaps brought face to face with surgeon and anesthetist for operation, so I feel constrained to lay much stress in this paper on the moral as well as the physical treatment of the patient before operation, and especially on the psychic factor of fear, to which sufficient importance is not usually attached. The point of view of patient is often neglected altogether. Let me give you some striking instances of what I mean. Fear alone, without exertion, seems to have the same effect as severe physical work on the heart, as Ballard points out; that is, it tends to dilate its cavities, especially the right, and to weaken its muscle, leading to a quick, feeble beat. In the case of very frightened people there is greater safety in giving ether, at any rate, at the commencement. Fear and chloroform are, singly, strong cardiac depressants. Together they are doubly dangerous. If to them surgical shock be added, the total effect may be serious.

When beginning the actual administration it must be remembered that the patient has no idea of what is expected of him to do, so explain exactly what you want him to do, and how to do it. Tell the patient to close his eyes, then breathe quietly in and out the mouth as if he were going to sleep, for the reason that this will, in the case of bad nose breathers, obviate any difficulty in that respect, and also because the mucous membrane of the mouth is much less sensitive than that of the nose. Hence there is less likely to be any reflex effect from the contact of a pungent vapor on the mucosa. It is important to tell the patient that he must not expect to go to sleep

straight away. In the case of chloroform, say that he will be asleep in three or four minutes; in the case of ether, in rather less. Regularity of breathing is most important during induction. To ensure this regularity in children or nervous persons, it is often a good plan to ask them to count. In a paper entitled, "How to secure deep, regular and quiet breathing at the commencement of narcosis," Hofman (Centralblatt, f. Chirurgie, January 19, 1901,) points out that regular respiration is necessary to obtain even inhalation of chloroform, and to secure this end the anesthetist must enlist the co-operation of the patient. Simple persuasion and telling the patient how to breathe are helpful, as also the plan of causing him to count aloud and slowly. This method, however, may fail, for simple counting forwards, in the way to which he is accustomed, would not cause any mental diversion from his surroundings. An anxious patient counts very quickly from one to ten, and then begins to gabble off the following numbers, meanwhile breathing quickly and lightly. To overcome this difficulty, Hofman makes his patients count backwards, from a number containing at least three figures, say from two hundred. The larger figures being more difficult to express, and needing a longer time to bring to mind and articulate, a breath is taken between each number, more especially as the patient is told to count slowly. The effort of mind concentration diverts attention from the operation, and is especially helpful in nervous females, tending to quiet, regular respiration, and uninterrupted inhalation. Meanwhile, talk to the patient, tell him he is doing very well, so that he may be accustomed to the sound of your voice, and, when consciousness is disordered, it will reassure him to hear the same tones. All these things, however, will not avail to insure quiet induction of anesthesia, unless the dosage of the anesthetic be very small at first. For instance, in the case of chloroform, begin with one drop on the wire mask. In a breath or so, add two drops; in two or three more breaths, three or four drops; and so on, gradually increasing dosage until unconsciousness ensues. Meanwhile do not allow anyone else to touch the patient or to talk, or else he may imagine that something is about to be done, or that he is being held. During induction of anesthesia, the importance of prudent speech is shown by this example: A female patient was brought into the theatre to be anesthetised for a small operation. She was in a dreadful state of fright, because she had some valvular lesion of the heart, and fully expected to die under the anesthetic. I tried to reassure her but with little effect. I was giving gas and ether. When I thought she had lost consciousness, I said to the bystander: "This patient knows she has heart disease, and thinks that she is going to die." Suddenly she, who had been quietly inhaling, struggled in an agony of fear, shouted out: "I shall die! My heart! My heart!" and had to be forcibly held down. I was very glad I was not giving her chloroform, for I should have feared fatality. This case shows very markedly that hearing is the sensory ultimum moriens during induction of anesthesia. The only voice heard by the patient should be that of the anesthetist, and care should be taken that there is no sound of clanging instruments in the room.

I should like to protest against the phrase so frequently used, "The patient took the anesthetic well." Though to a certain extent this may be true of the patient, yet by far the greatest factors in anesthesis are the anesthetist and his methods, and not the patient.

In a recent number of the St. Thomas' Hospital Gazette there is a

very amusing and well written article on anesthetic administration, supposed to be written by an old fashioned practitioner to his son. If you can get it, I would strongly advise you to read it. If you will allow me, I will here quote a couple of paragraphs, which show, in a negative fashion, the value of tact and sympathy. The title of the article might well be, "How not to anesthetise." The writer says:

"I went to see Mrs. Soden when she came back after her operation at the hospital, and, such is human ingratitude, she recounted her experience as follows: 'Lor', sir, I were that scared I wished I'd never said anything to you about me pains. The young gentleman came and put a sort of box on me face quite tight-like, and says, 'Breathe away, granny'; but there, what with being choked with a box, and thinking they were a-going to cut me open at once, I couldn't get me breath at all. If he'd let me have it off a minute, and say what they were going to do, I wouldn't ha' minded. But I were just like a rabbit caught in a snare. It weren't no good struggling, for some one comes and holds me down, and I thought that was my end, and a bad one, too. And I thought I was going to be all the same as when you made me comfortable and sleepy-like, time my first one was born.' So you see, Thomas, the poor old rag-and-bottle man came out on top, after all. I had my lesson on this point the very first anesthetic I gave. I was just qualified, and Mr. Brown, the anesthetist, wanted to get off. He told me to give the next anesthetic. The patient was a nervous young man, but not so nervous as I—I still remember my heart beating against my ribs. I got hold of my inhaler, rammed the mask into the man's face, said 'Breathe away,' and expected to see the worst happen. It didn't, but the next worst did. What exactly occurred I don't know, but I found myself one of a procession of four hastening down the corridor. The patient, in a red flannel zouave jacket, led at a terrific rate, his freedom of clothes being of material advantage to him. A short distance behind came a sister, who carried a blanket with which to cover the man's nakedness; then came the porter, moving with swiftness which is characteristic of his class; finally came I, at a walking pace, wishing the earth would swallow me. The man was eventually captured, and then he explained that he had run away because I did not know that he was not asleep, and that the operation had already started. As a matter of fact, tne 'starting of the operation' was a dresser measuring his leg for a plaster-of-paris splint. The memory of that case, and my conversation with old Mrs. Soden, showed me that you are the same as I used to be when I was your age. When it is accurate dosage of chloroform, bronchial affections following ether, and so on, you can teach me. But I can also help you, for I have seen in my time a fairly large number of operations, and a good many different anesthetics. Many a time have I desired to check some piece of brusqueness, and occasionally should have liked to have applauded a piece of tact, but I could not."

I can, I am sorry to say, emphasize this last observation from personal knowledge of instances of thoughtless act and speech in the anesthetic room or bedroom, and further from experience of their bad, and once nearly fatal, effect on the poor frightened patient. It is said that "talent knows what to do, and tact knows how to do it." In the treatment of a patient, he who uses tact can greatly help himself, the surgeon, and last, though I should have said first, the patient.

CLINICAL SOCIETY PAPERS

Chronic Rheumatism and Neuritis, By Dr. James J. Walsh.
Aneurism of the Innominate Artery, By Dr. C. Rakestraw.

CLINICAL SOCIETY OF THE NEW YORK POLYCLINIC MEDICAL SCHOOL AND HOSPITAL.

Regular meeting, with the president, Dr. Alexander Lyle, in the chair.

The paper of the evening on

CHRONIC RHEUMATISM AND NEURITIS

was read by Dr. James J. Walsh. There is probably no affection which has proved a source of more opprobrium to medicine than socalled chronic rheumatism. Forms of the disease are constantly occurring for which effective treatment is almost entirely lacking. The fact of the matter is, however, that the group of diseases known as chronic rheumatism is not a single entity in medicine, but represents a large number of separate pathological conditions, that is, a number of affections that bear practically no relation to one another and have no reason at all for being grouped under the word "rheumatism", except that they represent painful conditions usually occurring in the neighborhood of joints.

I have pointed out, in a series of articles published during the last few years, that many of the cases of so-called chronic rheumatism are really other affections. There seems no doubt the term "chronic rheumatism" will eventually disappear practically entirely from medical literature. At the present time most of the chronic rheumatism of the foot and ankle is really due to flat-foot. Most of the rheumatic conditions involving the forearm and wrist are really occupation neuroses.

Case 1. The patient is a man aged about sixty, who complains that he is no longer able to lift his arm straight out from his side or rather, that he has rheumatism of the shoulder and cannot use his arm. His ailment developed gradually about six months ago. At first he noticed that his arm was much more tired than before when he used it, and that the fatigue that developed became painful after a time. On rainy days his condition was much worse than on other days, and he became tired much sooner. On rainy days, too, the painful feeling and fatigue lasted into the night, so that sometimes he lost sleep on account of it. He went to see doctors about it, and was told that he had rheumatism. His shoulder was rubbed with various liniments, and he was given medicine.

An examination showed that the main element in the case was the impossibility of raising his arm straight out from his body. In a word the deltoid muscle refused to functionate. As a result of disuse for more than three months, there was some atrophy of the muscle. When asked as to his habits as to alcohol, he said that he usually drank three or four or more glasses of beer a day, and a glass or two of whiskey. When asked as to his occupation, he said that he was a "chipper", that is, he worked in a foundry, and when the rough castings came from the mould, with a hammer and chisel he went over the rough parts where joints in the moulds occur and made them as smooth as possible. This involves use of the hammer all day, and, as is well-known, means the use of the deltoid muscle and of the group of muscles supplied by the cir-

cumflex nerve. It is evident that his occupation has considerable to do with the location of his neuritis in this particular nerve — the circumflex. This nerve is overworked. He is taking enough alcohol at least to predispose to alcoholic neuritis, and so the condition is almost surely a neuritis.

At first the fatigue and pain that he noticed were due to the fact that the muscle was not receiving its proper trophic influences through the gradually inflaming nerve, and in addition, it was not receiving the ordinary nervous impulses to set it properly in motion. Why these conditions are worse on rainy days is one of the mysteries. It is well-known that a tooth that has not been troublesome for some weeks or months will become insistently annoying on a damp day. This is perhaps due to the hydroscopic character of the sensitive dentine, which causes it to take up moisture from the air. In some cases, however, the sensitive dentine is not exposed, and the fact that nerves will begin to be painful before the weather actually becomes very damp (the prophetic nerve pains that enable so many people to announce the approach of damp weather) shows that the nerve sensitiveness is probably due to the drop in the barometer and the consequent disturbances of the capillary circulation for the moment by change in air pressure.

This man has been treated with the salicylates and other socalled rheumatic remedies. Are they likely to do any good? Yes, whenever the painful condition exists, for in addition to being antipyretic they are anodyne. Twenty grains of salicylic acid or salicylate of soda, as many dentists know, will as effectually dispose of a toothache as ten grains of antipyrine or a corresponding amount of phenacetin or acetanilid. To the underlying condition, however, the salicylates, instead of doing good are likely to do harm. They are depressant drugs. Discomfort is, at most, only an incident in the case. It is loss of power that is the main thing. Some atrophy of the deltoid muscle already exists, and it will not be long before atrophy of structures within the joint will commence, because it is from the circumflex nerve that the joint tissues receive their trophic impulses. After a time, then, those changes will occur in the joint structures, which are pointed to with confidence as an evidence of chronic rheumatism. In reality they are no such thing, but a manifestation of trophic disturbance, partly nervous and partly due to lack of use.

Case 2. The next illustrative case is that of a man who complains of rheumatism in his elbow and hands. He knows that it is rheumatism, because several doctors have pronounced the magic word. He has pain in his elbow and some loss of sensation on the ulnar side of his hand. The muscles of his arm become very tired very soon when he uses them, and the fatigue, after a time, is almost painful. He points out very clearly where the difficulty lies, and makes a beautiful demonstration of the course of his ulnar nerve. He shows a tender spot in what is familiarly called the "funny bone," that is in the grove on the inner side of the arm at the elbow, and says that his third and fourth fingers are lacking in sensation. He says that the outer side of his third finger is without sensation, though the inner side retains a certain amount. He is a stonecutter and uses a hammer and chisel constantly. He is compelled to grasp the chisel very firmly, using especially the ulnar side of his hand for this purpose, because when he strikes the head of the instrument, its sharp edge is against the rock, and there is considerable vibration. It is his ulnar nerve, then, that is being overworked, and it is in this that the neuritis has developed. His habits with regard to alcohol are not so clear. He con-

fesses to drinking a few glasses of beer a day, but no whiskey. He is in the open air constantly, and it would seem that when overworked nerves are exposed to frequent changes of temperature, they become less resistant to infections of many kinds.

In this case we have to deal with a neuritis, and it will not be benefited by the administration of salicylates. The man will probably be compelled to give up his present occupation. He may never again be able to use his ulnar nerve in the way he has used it before. In the mean time, general stimulation, massage of the muscles of the part, provided it can be done without pain, and perhaps electricity, may do him good. Time and rest are the main elements, however, that will effect a cure, and interference with nature's slow processes will only hinder rather than help the progress of the case. It is probable that nature has been giving warnings with regard to the overuse of this nerve for several years. It is useless to hope that a patient will go up a hill faster than he will go down. It is of no use to promise these people an immediate cure; they cannot have it.

These cases illustrate certain phases of the painful condition about the shoulder-joints that are often called "chronic rheumatism". Many more of the cases of rheumatism of the shoulder joints than might be imagined can be explained in just the same way as in these cases. The tired ache that follows the use of muscles when certain auxiliary muscles are unable to functionate properly, because a low grade neuritis prevents the sending down of motor impulses, is the basis for much of the discomfort experienced in these cases.

As a matter of fact, faithful examination of the cases that we are tempted to call chronic rheumatism will practically always bring about their relegation to some other category than that of rheumatism. If rheumatism means anything, it means a collection of fluid in the joint, because it is derived from the Greek word "to flow", meaning an excess of secretion. None of these cases presents a superabundance of fluid within the joint capsule, and though changes sometimes takes place within the joint, these will be found to be due partly to the lowered trophic condition incident to the nervous affection, and partly to the unfavorable circumstances in which the joint tissues are placed because of the inaction.

Dr. W. R. Townsend opened the discussion, saying that a great number of cases of flat-foot follow acute rheumatism and gouty attacks, but he did not believe that all cases of rheumatism of the foot were flat-foot. While rheumatoid arthritis may very well follow one of the infectious processes, still it is difficult to prove this always to be the case. It is very easy to accuse a man of having had gonorrhea or syphilis when there are no symptons of these conditions present, but a patient's statements are not always false, and other causes must be sought, very often, to account for the joint symptom. Chronic rheumatism, while it may be rare, certainly exists, although the classes that the reader of the paper had grouped together were certainly of neuritis or allied to it.

Dr. W. B. Pritchard said that the paper was particularly interesting in the breadth of territory covered. Regarding what had been said about errors in diagnosis, he did not see how any physician could ever mistake an artisan's neurosis or any ordinary form of neuritis for rheumatism. There is nothing, in nervous diseases, at least, which gives rise to more distinctive symptoms than neuritis. Yet he had seen cases occasionally diagnosed as rheumatism which on examination proved to be neuritis. Patients with locomotor ataxia, suffering from the

pain characteristic of tabes, often assume that they have rheumatism. He thought, with the last speaker, that there was undoubtedly such a thing as chronic rheumatism, but that neuritis and the occupation neuroses are often confused with rheumatism.

Dr. M. Packard said that at the nerve clinic at the Polyclinic he had seen a great many cases of neuritis, and in tracing the etiology of these cases, he had found that rheumatism plays a very important part in them. In some instances the symptoms are very similar, and it is easy to make a mistake in diagnosis.

Dr. L. L. Roos said that he had worked with Dr. Walsh in the General Medicine Clinic, and although he had seen since then about three hundred cases of rheumatism at the Polyclinic and Vanderbilt Clinic he had not found one that could not be classed under Dr. Walsh's three headings. He had not seen a case of chronic rheumatism.

Dr. Walsh, in closing, said that his idea was simply to express the clinical results of examination of patients at the Polyclinic, and he had not seen a single case as yet that could not be traced to one of the classifications mentioned in his paper. The changes about the joints may be due to neuritis. The cause of rheumatism is not positively determined, but most authorities agree that it is a micro-organism. He thought there were at least three or four groups of these micro-organisms, and it may by one of these groups which causes the neuritis. Uric-acid diathesis is one of the old, crude notions that the profession should get rid of as quickly as possible. He does not believe that it exists. The word "rheumatism" is used in many connections—rheumatic neuritis, rheumatic tonsillitis, for instance. If the term signifies that the micro-organism that causes rheumatism sometimes causes the other diseases, then it is consistently used, but if it is used as a constitutional co[illegible] the then the profession is passin[illegible] the the point of its knowledge. [illegible] the [illegible] it [illegible] of

ANEURISM OF THE INNOMINATE [illegible]

Dr. C. Rakestraw prese[illegible] teresting specimen of innominate aneurism from a patient who had been under the care of Dr. John A. Wyeth. The man, who was forty years of age, had contracted syphilis some twenty years ago, for which he underwent treatment several months. He had always enjoyed good health until two years before his death, when he suddenly developed pronounced pain in the chest and dyspnea. The latter symptom soon became constant. When he came under Dr. Wyeth's care physical examination revealed the following conditions: Inspiration difficult and accompanied by wheezing sounds. Expiration normal. Heart sounds normal. Radial pulse on right side retarded. A pulsating tumor could be made out at the sternoclavicular junction, which yielded a distinct aneurismal bruit. The right vocal cord was found to be paralyzed and there was a distinct bulging of the right wall of the trachea. Breathing was labored and painful, and it was noticeable that during inspiration the diaphram remained motionless and that the abdominal wall was drawn inward. After a very prolonged attack of dyspnea, tracheotomy was performed, which gave some relief. Twelve ounces of blood was withdrawn from his arm in order to diminish the size of the aneurism and so relieve the pressure on the phrenic nerve. Pronounced relief followed this measure and lasted about one week. The patient's condition then became worse and it was decided to operate. The clavicle was removed and the common carotid artery was tied between the aneurism and the bifurcation. The subclavian was also tied. The patient died six hours after the operation.

MODERN THERAPEUTICS

nal communications and short abstracts giving the latest in therapeutics.

"INCURABLE" CASE CURED.

By C. A. Palmer, M. D., Bowdoinham, Maine.

The busy practitioner is interested in results. Here is the history of a severe case of diabetes mellitus treated with arsenauro:

Mrs. E. R., aged 68; saw her January 1, 1900. Signs of rapid recent emaciation and great loss of strength, extreme prostration, physical and mental. History of profuse micturition for several months. Marked pruritus vulvae. Patient believed she had a cancerous womb, having been told her case was incurable. Examination showed no uterine disease, merely slight leucorrhoea. Diabetes mellitus was very evident even before urinalysis was made. Urinalysis showed high specific gravity and large percentage of sugar. I ordered a saline purgative to thoroughly flush the intestines, and established a strict diabetic diet. I then administered arsenauro in five (5) drop doses three times a daily in a large glass of water, increasing one drop every day until arsenical symptoms manifested themselves. Improvement was most marked and rapid. At the end of thirty days the amount of urine voided was reduced to nearly normal. Strength of patient rapidly returned. Pruritus vulvae entirely disappeared. Only slight traces of sugar in urine. The dose of arsenauro was now increased one drop every day until reaching a dosage of seventy (70) drops t. i. d. Colicky abdominal pains and slight puffiness under the eyelids now observed Urinalysis showed total absence of sugar. The dose of arsenauro was now reduced to twenty (20) t. i. d. and continued for three months under a strict diet. Frequent urinalysis showed no sugar. Arsenauro was now discontinued and a more liberal diet allowed. Patient has been seen frequently during the last two years, but there has been no recurrence of the symptoms.

This case is typical of several others which I have treated in the same manner and with exactly the same results. I submit the foregoing in the hope that it may be of value to others who have found as little assistance as I in the text-books treating of this puzzling ailment.

PAIN AND ITS REMEDY.

By J. D. Albright, M. D., Philadelphia, Pa.

Believing that the bar in the way of the profession, in the use in opium, is its tendency to evil after-effects, and the harum-scarum idea that a little opium will induce the habit, and these terrible concomitants (?) I wish to call their attention to a preparation that I have long been using, and have not yet seen one case in which the habit was formed, nor ever had any complaint as to the evil after-effects. This remedy is papine, a preparation of opium from which the narcotic and convulsive elements have been removed, rendering it a safe remedy for children, as well as those of mature age. Up to a year ago I always gave chlorodyne tablets and viburnum for after-pains. Then I came across a case that refused to yield to them in the time I was accustomed to have them do so,

and I concluded to try papine. Its results, to make the story short, were such that I now never give anything else for after-pains, and they yield in about half the time that was required with the above-named remedies.—Medical Summary.

OBSTETRICAL PRACTICE.

In contrasting modern obstetrical practice with the methods formerly in vogue one cannot fail to be impressed with the greater care bestowed upon the parturient woman. This is shown by the scrupulous cleanliness and antiseptic precautions recommended in every modern text-book, as well as the earnest efforts made to relieve the pangs of childbirth. The latter point is one of great importance, since it is probable that women of the present generation, owing to various causes, and especially to a less robust physique and a more sensitive nervous system, are less able to endure the pains connected with parturition. It is on this account that the labor pains are in many instances less effective and more intensely felt. Under these circumstances Hayden's viburnum compound becomes a real blessing to many parturient women. During the first stage it exerts a soothing effect, relieving nervousness and restlessness when given in doses of one dessertspoonful, followed every half hour by a teaspoonful. In the second stage its action is that of a uterine tonic, increasing the efficiency of the pains, and here it may given in teaspoonful doses whenever required for that purpose. In the third stage it satisfactorily replaces ergot, being equally efficient and devoid of its unpleasant sequelae. One of the striking differences in the effects of ergot and Hayden's viburnum compound during the period of parturition is that while the former produces a continuous contraction of the uterus with scarcely any pains Hayden's viburnum compound simply reinforces the strength of the uterine contractions without otherwise changing their character. This enables it to be employed when ergot would be dangerous both to the mother and to the child.

MERIT AND RELIABILITY WIN SUCCESS.

We are advised that our old friend, "the Antikamnia Chemical Company," for many years located No. 1728 Olive street, St. Louis, Mo., has moved into its new home, Nos. 1622–1624–1626 Pine street, in said city. The new laboratory is fully equpped with all the latest chemical appliances and machinery, which afford increased and needed capacity for the manufacture of the well known and reliable antikamnia prepartions. The company's sales during 1902 were the largest in the history of their business, and that the demand for their products is constantly growing is demonstreted by the fact that the first three months of this year show a pronounced increase of sales over those of the corresponding months of last year. In fact, it is the growth of the business which necessitated the removal into larger quarters, where the company has 75 per cent. more space than in its old plant. The steadily growing esteem in which the Antikamnia Chemical Company's products are held by the medical profession throughout the world is due to the well known merits of the original antikamnia tablets and powder, as well as to the undoubted remedial efficiency and pharmaceutical excellence of the new combination tablets which this company has from time to time added to its line of specialties.

BRIEF MENTION.

Venesection is often a valuable measure in treating puerperal eclampsia.

Fellows' hypophosphites have been used for years and have never been found wanting in their desired therapeutic action.

H. Kirk White & Co., Janesville, Wis., have a modern pharmaceutical laboratory and make a line of reliable preparations. Write them for prices and samples.

I have had good results from the use of sanmetto in nocturnal enuresis of children; have also prescribed it in cases of frequent micturition in old people, with marked benefit; also find it beneficial in pre-senility. I think it is a good medicine in all cases where anything of its nature is indicated.—S. W. Badger, M. D., Athens, Pa.

Mesotan is a salicylic acid derivative for external application in rheumatism. It is used in the following form:

℞ Mesotan, ʒvj
Lavender oil, m.v
Olive oil, ʒvj
M. It is rubbed thoroughly into the affected parts and is curative.

The eastern office of the Abbott Alkaloidal Co. is now located at 50 West Broadway, New York, formerly 93 Broad St. Their eastern business has increased so rapidly within the last year, under the management of Mr. N. B. Harris, that large and more commodious quarters were necessary. Friends will receive a hearty reception from Mr. Harris at any time in the new home.

It is often necessary to administer iodine but the objections to most iodine preparations are such as to prevent their use. Burnham's soluble iodine has no objectionable features; it is efficient and not irritating. The Burnham Soluble Iodine Co., Pemberton Square, Boston, will furnish desired information regarding their reliable product.

The customs officials at Niagara Falls recently seized 200 boxes, shipped from Canada, labeled trionol, but which contained acetanilid. They were shipped from Toronto, where some one is shipping to this country spurious goods of this sort. Packages of acetanilid marked phenacetin and trionol are being sold in this country. The Farbenfabriken, of Elberfeld Co., is prosecuting suits against salesmen and druggists who have been selling the counterfeit goods.

The Dietetic and Hygienic Gazette, commenting upon the dietetic value of iron says: Pathologists have given pointers as to the special condition of the iron in the system and in the circulating medium, and the newer preparations aim to imitate that condition. Most of them have a brief day of fame and them drop out of sight for the reason that they lack some element of eligibility. Few are standing the test of time and the critical ordeal of the clinicians. Foremost among these it is safe to name Gude's pepto-mangan. It is probably the nearest approach to a physiologic reproduction yet devised. It deserves universal popularity, and its manufacturers do well to restrict its sale to strictly ethical channels.

SOCIETY ECHOES.

AMERICAN MEDICAL ASSOCIATION.

The fifty-fourth annual meeting of the American Medical Association was held at New Orleans, May 5-9, with a large attendance. The president of the association, Dr. Frank Billings, of Chicago, presided at the general sessions.

Dr. Billings delivered the president's annual address on "Medical Education in the United States."

The address was an able effort in which Dr. Billings expressed some emphatic convictions on the subject. He believes in fewer and better colleges and a high standard of medical education. He deprecates the existence of the small colleges which are adjuncts to private interests and which he terms "proprietary colleges." He believes the expenses of meeting the requirements of modern medical education are such that they can only be met by a university, state or endowed college. In concluding he said:

"The American Medical Association should take as its ideal and standard of medical education the university medical college, with all the name implies in regard to the fundamental medical sciences, and to the clinical branches. It should use its influence to drive out of existence those proprietary medical schools which are conducted solely as money-making institutions These measures can not be accomplished at once; but medical science demands it, the profession demand it, the people demand it, and look to the American Medical Association as the chief influence which shall accomplish this end.

This association should, therefore, stand for, and should use its whole power to improve medical education in this country. It is said that we never exceed our ideals in practice, and that if we lower our ideals our conduct sinks to a lower level.

As the direct agent by which the American Medical Association may exert its influence in the elevation and control of medical education, the committee on medlcal colleges and medical education should be made permanent and should be given adequate power and sufficient annual appropriation to make its work effective."

Dr. J. M. Anders, of Philadelphia, gave the oration in medicine on "Social Conditions in America in Their Relation to Medical Progress and Disease." Dr. A. F. Jonas, of Omaha, presented the oration in surgery on "Cancer and Immunity.

The officers elected for the ensuing year are: President, Dr. J. H. Musser, of Philadelphia; first vice president, Dr. G. C. Savage, Tennessee; second vice president, Dr. Isadore Dyer, New Orleans; third vice president, Dr. C. L. Hall, Missouri; fourth vice president, Dr. G. F. Jenkin, Iowa; treasurer, Dr. Henry P. Newman, Chicago; secretary, Dr. George H. Simmons, Chicago. Board of trustees—Dr. W. H. Welch, Baltimore; Dr. Myles F. Porter, Fort Wayne, Ind., and Dr. M. L. Harris, Chicago.

Next year's meeting will be held at Atlantic City.

* * *

The State Medical Society of Wisconsin will hold its fifty-seventh annuaul meeting in Milwaukee, June 3-5. A very interestiug program has been prepared. The annual address in medicine will be given by Dr. Arthur Edwards, of Chicago, on "The Diagnosis and Treatment of Nephritis." The annual address in surgery will be delivered by Dr. Mayo, of Rochester, Minn., on "Surgery of the Stomach."

The Wisconsin Medical Recorder.

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LEADING ORIGINAL ARTICLES.

ANGIONEUROTIC EDEMA.

By F. C. Drenning, M. D., Duluth, Minn.

Both because of its rarity and the fact that there are many cases we do not see at all, angioneurotic edema is of interest to the physician. We do not see every case of this disease because of its lightning-like appearance and disappearance, many patients recovering before they know they are sick or have made up their minds to call a physician.

As the name indicates, it is a swelling of nervous origin, supposed to be due to some nervous influence upon the lymph vessels, causing them to exude lymph. Some authors have described it as giant urticaria, because of its resemblance on a larger scale to urticaria. As it never results fatally and so seldom developes a stage of chronicity, no lesions have as yet been discovered and the pathology is necessarily obscure.

It is a disease of early adult life, occurring almost exclusively in males of robust type. Coming on suddenly and without warning, the lower legs, backs of hands and face,—the parts of predilection—take on a feeling of stiffness or fullness followed by the swelling and puffiness, definitely outlined and discoloring the skin a deep red or paler hue. The puffiness about the face may be of such extent as to almost close the eyes and the hands may be so swollen and stiff as only to be opened and closed with difficulty.

The legs are less often the seat of extensive changes. The pulse and temperature remain normal. There is no pain and no constitutional disturbance of any character, as a rule, other than above mentioned. It is the swelling that alarms the patient and causes him to seek the physician's aid.

The cases here recorded occurred in adult males and ran a typical course, coming on suddenly, lasting two or three days and disappearing just as suddenly as it came without change or incident. The treatment in all cases was practically the same, a cathartic, nerve tonic and rest in bed.

Case 1.—American, attorney, aged thirty. In good health. He was an inveterate cigarette smoker. Attack came on at the end of a hard day's work. There was feeling of fatigue and stiffness about the face and hands, and on the morning following the face was markedly swollen and somewhat paler. The hands were slightly swollen and stiff. Temperature and pulse were both normal. The legs were unaffected.

Treatment consisted in a saline cathartic, strychnine tonic and rest in bed. Recovery on the third day. In this case a subsequent attack occurred a year later, which ran practically the same course.

Case 2.—German, shoe clerk, aged twenty-eight. First noticed swelling and redness of lower legs, attended by slight itching and sense of warmth, and on the second day the face and hands became greatly swollen, with sharp lines of demarkation bordering the swollen areas. The eyes were almost closed by the engorgement, and the hands were stiff with the swelling on the backs, extending from finger-tips to wrists.

Pulse and temperature were both normal and there was no constitutional disturbance discernable.

Treatment consisted in rest in bed, saline cathartic and tonic of iron, quinine and strychnine with recovery on the third day.

Case 3.—American, office clerk, aged twenty-eight. In this case there was a precursory attack of eczema punctata affecting the face and fore arms, which lasted for a week and was followed by a swelling of face and hands coming on suddenly at the end of a days work. The face was most affected, the eyes being almost swollen shut.

This case was not seem till after the edema had almost completely subsided, but had been treated with home remedies, cream locally to allay the slight burning present and salts for a cathartic. The attack lasted three days.

* * *

Dr. E. S. Ferris, Henry, Ill., has been using the X-ray in the treatment of psoriasis with success. He reports, in the American Electro-Therapeutic and X-Ray Era, the complete cure of a man, aged 50, who had had psoriasis as long as he could remember.

TREATMENT OF FISTULA.

By Charles C. Miller, M. D., 100 State Street, Chicago, Ill.

(Continued from page 144, May Recorder.)

Blind external fistula have no opening into the bowel. They present several features for consideration in their treatment. The most important point for the operator to decide is as to whether he will in his operation make the fistula complete by opening into the bowel, or whether it will not be advisable to attempt a cure without so complicating the condition. In some cases this point can be decided with ease, as there may be several inches of healthy tissue between lesion and bowel, making it entirely unnecessary to consider opening into the rectum, but in other cases a mere delicate film of mucosa separates the cavity of the fistula from the lumen of the bowel, and no judgment is required to decide that the fistula can be made complete with advantage. In other cases we will have a considerable amount of tissue intervening between the fistula and the bowel, but it will be infiltrated and unhealthy, so that we can advantageously force our director through into the bowel during the operation.

Where a considerable amount of healthy tissue intervenes between the fistula and the bowel, or where the fistulous tract does not extend to the sphincter muscle, there will be no need for opening the bowel. In such a case after due preparation, a grooved director is passed into the opening of the fistula as far as it will go, and then the parts over it are split, opening the fistulous tract or cavity. The edges are not trimmed as in the complete operation and then the bottom of the wound searched for branches. When all branches have been searched out, opened and their overhanging edges

trimmed away, and all unhealthy tissue dissected out, or the parts thoroughly curetted, then the cavity is filled with iodoform gauze, this held in place with a quantity of sterile cotton and a bandage.

In the second variety of blind external fistula we will find such a thin intervening septum between the fistula and the bowel that we can feel no hesitancy in making it a complete fistula and then finishing the operation as we do in an ordinary complete fistula.

Where a fistula exists in which the sphincter is slightly undermined by the process, and where we are hardly able to decide as to the health of the tissues making up this intervening septum, we must exercise our judgment as to the individual features of the case in deciding the course to be pursued. If the fistula should be in a strong, healthy man, and we should find upon introducing the finger into the rectum, that the sphincter is strong and well developed, our best course would be to force our director into the bowel, withdraw it at the anus and complete the operation by dividing that portion of the sphincter upon the director. In contrast to this, should we be dealing with a fistula in a woman in poor heslth, and who possessed a poor physical development, then with finger revealing a small, lax, nonresisting sphincter, we would if possible avoid the opening into the bowel and the completion of the operation by dividing even a portion of the sphinter. If, too, in our former case we should have the fistulous tract extending high into the soft parts about the bowel, so that our opening in the bowel made by the director would be made rather above than through the sphincter, we would hesitate in taking such a step. In this way it will be clear to my readers that the judgment of the operator must be influenced in this operation by the conditions present in the individual. Until experience has ripened by contact with many cases the best advice I can give is for the operator to be careful. Be on the safe side. Don't divide the entire sphincter in any case, don't partially divide the muscle, if there is very little development of it and it appears to have but little tone. Later on if the case does not progress well under the milder treatment in not dividing it, then the patient can submit to its division. In such a case where we are in doubt and decide not to divide the muscle, we should be very careful to secure a condition most favorable for complete healing before putting the patient to bed. We should in such a case trim the parts even more thoroughly than in the complete operation. If the fistula has extended somewhat under the sphincter, it is always well to cut the few fibers which have been undermined. No accessory sinus should escape division and a trimming of any flaps formed by such a division. Any unhealthy tissue must be carefully curetted or if possible dissected out.

After our operation, should the parts fail to heal or the tissues between the wound and the bowel break down, forming a short fistulous tract into the bowel, then we will have to divide this to secure a complete cure. If the patient is adverse to taking a general anesthetic infiltration with cocain solution as previously described will prove adequate for the completion of the operation.

In rare instances we will find cases where the sphincter has been completely undermined for a considerable distance. This is due to the continual unrest of this muscle facilitating the burrowing of the pus. In such a case we are confronted with a condition that requires judgment according to the individual conditions of the case. If the burrowing has involved only the superficial fibers of the sphincter, then the cutting through into the bowel

will not likely produce a condition to be regretted. If the burrowing be under the greater portion of the sphincter, it should not be cut but thorough curetting trusted to as a means of exciting the parts to heal. In the after treatment, in a case where the sphincter is so undermined, vigorous antiseptic treatment may limit pus formation and permit of the formation of healthy granulations and union of the parts. As a dressing in such a case gauze saturated in balsam of Peru will be found to be an excellent means of exciting healthy granulations. In using antiseptics to check the formation of pus, care must be taken not to persist too long in the use of those agents which will prevent the formation of granulations. It is to be remembered in the dressing of all fistula wounds that many of our stronger antiseptics will destroy granulations, and if the granulations are healthy these antiseptics should be avoided.

PHYSIOLOGY AND PSYCHOLOGY.

By Herman Gasser, M. D., Platteville, Wis.

(Continued from page 142, May Recorder.)

Life is physics, it is a highly organized and established system of physics in man, but as this system of physics is the ever-present unity of the system of psychics, the life of man with his circulating system of nervous energy is not the world idea, the world of psychics, only a physical system in the world system. It becomes a world idea with its system only when all the bodily functions by the route of the nervous system become adjusted, organized and assimilated into a related unity of their function in the brain, the product of which is the ever-present world idea.

With this system of relation, however, where does the system of the world of physics end, and the system of the world of psychics begin? As the world idea is the ever-present unity of system and the system of the world the ever-present idea, the one must be woven into the other by the same system without any well defined and distinct demarkation, for the world idea is the world system, the only world we know. In man this highly differentiated and organized world system, while still an interdependent and related part of it, by the same system weaves itself into the idea of the world unity. In the transit of all the specialized and organized functions of its energy they do not become sensations, much less an idea, until they are adjusted with some system of relation with all the other functions of the body. It is not even a sensation, but purely a system of physics until it becomes adjusted with some degree of relation to the whole. As the sensations become more adjusted and organized with unity and system to the whole of sensations they are woven into a more complete and composite system of the world idea. As soon as the system of physics, with all its variations, enters into the ever-present unity of relation it becomes the system of psychics, each still a related part of the world of physics and the world of psychics. It never loses its system of physics in the system of psychics; continues on in the same system of unity in the one as well as the other. The physical system of the world is, or becomes, a part of the ever-present unity of the world system, the world idea. As the anatomy and physiology of our body with its nervous system and brain is an interdependent and related part of the physical system of the world, so its product in the ever-present unity of its expression is the world idea; the system of the one the system of the

other. The world system, however, is not the system of the world idea; the world idea is the world system. It is not any special system of force, no matter how highly organized in the world's force of system that is a sensation, much less an idea; it only becomes a sensation in its transit into the unity of the world idea, the world's ever-present system of relation in the organized and functional product of the brain. As the world of physics is a related and organized system of work, so is the world of psychics, and as there are no specialized systems as entities in the world of physics but all related parts of the whole, so there are no specialized systems as entities of psychics in the world unity of psychics. The more the world system of physics becomes adjusted and organized into a unity of relation in the brain the greater the unity of the world idea, or psychics. The system of physics becomes the system of psychics, and as the latter is a product of the former, the world is a idea with its system of work.

If the physiological system of living functions in man was purely a physical system of creative work then the world would be an unadulterated materialism, but strange as it may sound, there would not be an idea in it, no sensations or volitions, no mind or thought. This is the world of physics we know in our world of psychics. How then has this world of psychics come to be in this world of physics? This is the problem that has engaged a large share of the thought and study of mankind, and which I believe meets with some system of solution when we once fully realize and understand what the circulation of nervous energy in the nervous system means. This idea of the function of the nervous system gives us as complete a system of physical or physiological functions of life as we have of physical nature in general. In this comprehensive, scientific and lawful system of the physics of life we find the foundation for a lawful and scientific system of psychics.

We find the physical world is not only a system, but that this system is an ever-present unity of its expression in this system of relation. This ever-present unity is the world equilibrium with its limits of tolerance wherein any part of its system that departs too much from the unity of its relation strains and finally ruptures the limit of its tolerance, only to be drawn back with violence and disorganization into this unity of the world equilibrium. This unity of world equilibrium is also the unity and equilibrium of the functional life with all its variations and limits of tolerance. With this simple physical deduction of the system and principles of our living bodily functions, the consensus of which we call life, is the ever present unity or equilibrium of life, the problem becomes resolved into: What is this unity or equilibrium of life? Having chased it so far with physical system let us continue our journey with the same system, never losing a thread or missing a link in its chain.

Our life is an organized system of living functional activities. The heart, lungs, liver, nervous system and brain are systems of life; not any one of them, however, is our life; it is the consensus, unity or equilibrium of all our bodily functions that is life. We cannot find it in any one or any system of organs, but in the unity of all. There are no secrets of life; life is an open book; life is the world; the world and life may be a mystery, enigma, miracle, but never a secret. Life being the consensus and unity of all our bodily activities, with their system of relation or reaction in the physical world, the system of relation and reaction of the physical world in unity, consensus or equilibrium is life. All this. however, only demonstrates that

the physical system of the world is the physical system of life; that life is purely a system of material force. This, indeed, is true; but in the elucidation we have also shown that it is the ever-present unity, measure of the world equilibrium. As the world equilibrium is the ever-present state or measure of the world system of creative physical forces, the organization and growth of the latter becomes the unity or measure of the former, is the measure of the world and life. Man's system of physical, and unity of work measure, go hand in hand.

With this conception of life we have apparently two forces to deal with; one the physical system of life, the other the ever present unity, measure or equilibrium of life as related and interdependent parts of the same universal system. Why and how has this distinction come to be when every analysis demonstrates they are one?

The unity or equilibrium of life, as well as the unity and equilibrium of the world we have shown is the only world we know, is the measure or interpretation of the world system. But if the system of the world is true, a reality as interpreted in the ever-present unity or equilibrium of relation, and this measure the only world we know, what becomes of the reality and truth of the world system? We have stated that the world system is the measure of our ever-present unity of it. If the ever-present unity is the only world we know how can the world system be its ever-present unity? The statement is contradictory and self-annihilative, for we as surely know the world, as the system of the ever-present unity by which we know it. Indeed, is not the ever-present unity the measure of the world system? The world system the ever-present unity of its measure? The reality and truth of the one the reality and truth of the other?

Again the problem resolves itself into: What is the relation between the ever-present unity and equilibrium and the enduring world system. That the world is an immortal creative and constructive system and unity of equilibrium there is no doubt. Indeed, the ever-present system of the world equilibrium is the world system with its limits of tolerance. The world system with its limits of tolerance is the ever-present measure of the world's unity—equilibrium. This, at least, demonstrates that the world and life is an ever-present unity, equilibrium with its limits of tolerance in the system of the world; that the ever-present world unity is the measure of the world with its limits of tolerance in the system of the world. Everywhere, upon all sides in the world system and the system of life it endeavors to, and often ruptures the system of its limits of tolerance, but is always and invariably brought back into the world unity and equilibrium. Special, local and individual parts of the world system may become estranged, strained and rupture its limit of tolerance in the system with their destructive and ruinous reaction, but this is so only because the world is an ever-present unity and equilibrium that cannot be violated. We may violate and strain a special system in the world system for a time, locally strain its equilibrium, but it will always be at the cost of the strained system in the system, never to the world's unity and equilibrium, for it is the world. It would be as easy to direct our earth out of its orbit as to disturb the world's equilibrium. With the world's unity, equilibrium and system of purposive and creative work the only standard and measure left us: What is this world equilibrium and unity? Our only answer: The world system with its limits of tolerance in the world unity.

That the unity or world equilibrium is the world and life, the only world and life we know, and the system of the physical world

its instrument, is beyond all question and doubt. What, then, is the relation of the world unity with the system of the unity of the world? So far we have expressed the problem purely in the terms of physics, caused the world unity or equilibrium as well as the system of the world to be interpreted by the same physical terms, but they will no longer answer. The physical system of the world we find is the world unity, the world idea, the only world we know, and the system of the physical world its expression. That it is not the world system that is the world unity or idea; not the system of our life that is the unity of life, but their unity. The system of the forces of the world and life is the system of life in the world, and life is the ideal and ever-present unity. Unity is the life and world with its system. The world system of creative work is the system of the world unity or idea of creation. The world idea is the world system, the world system the world idea. The world idea has its limit of tolerance, while the world system has its limits of intolerance, because it is a part of the system of tolerance. The world idea is the world standard and measure of system, not our system of the world the measure and standard of the world idea. The world system of force or work is our idea of the world, woven out of the system of the world idea. The world idea worked through the system of the world into our idea of the world, and our world idea by the same system of work retraces back our idea of the world into the world idea. The world is an ideal unity and equilibrium that is a creative and constructive system of work. The physical system of creative work in the world is not the world unity, equilibrium or idea, only the system with the limits and tolerance of its expression in the world unity, world equilibrium. The world is not a system of physics, the world is psychics with its system of physics.

The world being an equilibrium with its system that becomes unfolded to or known by us in the ever-present idea leads us to the conclusion that the physical world is the system of the world idea, the only world we know. This also means that the world idea or world system of equilibrium is a creative and constructive system of work. The physical world system is always and invariably the limit of the world's unity, world's system of equilibrium, which is not only our idea of the world but the world idea. The physical man reacts upon the physical world with system because the world is a system of equilibrium, and is also why man's idea or system of world equilibrium lives in and reacts upon it with the same system that his physical body reacts upon the world of physics. Man's physical system reacts and feeds upon the air, earth and water, the light of the sun, moon and stars, but it is only the consensus of all that is world system of equilibrium wherein it alone can and does become known to us in our ideas.

(To be continued.)

GONORRHEAL ARTHRITIS.

By F. G. Thomason, M. D., Kissimmee, Florida.

I learned early in practice that potassium iodide was the best thing I could get in gonorrheal arthritis, and a very common ℞ was potassium iodide, ʒj; aqua, ℥ij. Ft. Sol. Sig. Ten drops after each meal and increase one drop a day until thirty drops are taken three times daily.

It is not a specific, but I have never found anything better. Try it and give me your best ℞ for cystitis in next months Recorder.

"ARE YOU NOW IN SOUND HEALTH?"

By Reginald Barkley Leach, M. D.
St. Paul, Minn.

Chairman Bureau of Medical Jurisprudence, Minnesota State Homoeopathic Institute; President St. Paul Society of Homoeopathic Medicine and Surgery; Medical Examiner The Royal League; Medical Examiner The Modern Samaritans, Etc.

This is one of the many interrogatories propounded in the application blanks of the numerous old line companies and fraternal societies and orders offering protection to the widows and orphans of our fellow citizens, for whom almost all present at one time or another make physical examinations.

To all appearances, the question is fair and, within my personal knowledge and experience, has never been "balked at" by an honest applicant. It is, however, open to serious debate: What constitutes sound health? at least in the mind of the applicant. How may an applicant for insurance unequivocally aver himself in sound health and yet in no sense contradict any of the many other and equally pertinent interrogatories put to him?

For instance: In a well known case, at trial a century ago, the presiding justice held that "one answering that he was in sound health did not necessarily mean to aver that he had not the seeds of a disorder; that we are all born with the seeds of mortality." No insurance company, society or order of today would hold that the applicant should have been cognizant of any "seeds of a disorder" within him, but would, on its own account and own responsibility, decide this question to its own entire satisfaction through such "family history" as the medical examiner might extract from the applicant. Unfortunately for the company, society or order, however, the average applicant for protection today in many instances knows little if anything of his family beyond his own parents; or, at most, beyond their parents, and knows that little very imperfectly or only by tradition.

This of course applies more particularly to the average applicant for insurance protection in America and to the average applicant for the fraternal society or order class of protection, as said applications are made upon a class whose parents are either foreigners or early middle class Americans who had little time for genealogy and less inclination for same because, possibly, of that spirit of intolerance shown them by persons whose genealogy was oftentimes their sole claim for distinction above their fellows.

Disease, or the immaterial modification of our atomic integrity, might well be at work within any one at the time of his application and he be none the wiser; for prodromes of even the most malignant of maladies are oftentimes of such immaterial modification, often for long periods of time, that any one, even one developing within his eye ball a melano-carcinoma (which same almost certainly destroys life within two years after the enucleation of the eye, and enucleation is almost always performed in these cases,) might honestly aver himself at the time of his application in good health.

Such applicant would answer thus because he might feel himself to be in sound health despite certain conditions actually present, in their incipiency, to be sure, in him and which will surely destroy his life, and yet at the time of his examination be wholly unknown to him.

The applicant, unless disfigured or perturbed by signs or symptoms characteristic of some malady patent to the examiner, or, unless his pulse be unduly accelerated or his temperature above normal or his urine shows un-

mistakable signs of trouble, can, so far as his physical condition shows, alone be the judge of his soundness of health at the time. And yet even this is known to the average applicant only in a negative sense or through the absence of signs and symptoms leading him to a contrary belief.

The question is one clearly open to the practice of fraud and yet even if honestly and truthfully answered in the affirmative, the company, society or order accepting the risk is always more or less unguarded against the possible contingency of recent previous infection not recognized or recognizable by the applicant and not patent to the scrutiny of even the most painstaking medical examiner's eyes or other senses or responsive to his chemic tests.

In another case, reported as at trial about the same time as the one just quoted, the justice held that "one who was subject to the gout did not misrepresent when he averred himself in sound health. Such judgment, of course, would hardly prevail today; for the real intent of the interrogatory undoubtedly is: "Is there a fair probability that the ailment from which the applicant has at times been subject will tend to shorten his life"?

In such a case, today, the medical examiner would undoubtedly decide the case at once in favor of the company, society or order by refusing to recommend said applicant for protection.

The question of sound health is, on the part of the company, society or order, apparently sufficiently covered for their protection in the further interrogatory: "Do you know of any facts or circumstances, not hereinbefore mentioned, relating to your physical condition, family or personal history, tending to shorten your life, which have not been distinctly set forth above?"

Yet even that does not always answer; does not always fully protect the company, society or order; for ignorance of the very meaning, the full intent, of all questions, often leads the applicant to a negative answer to this question when a positive answer is the absolute and only truthful one and, in many cases, would have been so given but for this same ignorance of language frequently in itself a novelty to the applicant (often a foreigner) and none too often fully comprehended and interpreted by the native English speaking race who, though they may understand ordinary English, are often and naturally ignorant of technical terms.

As an instance of this: A case, cited by Allen McLean Hamilton in his sytem of Legal Medicine (Vol. I, p. 523) was to the effect that a certain lady, at the time of her application for insurance entertaining a swelling in one groin, was, to all appearances, in total ignorance of the name and possible dangers of said swelling; consequently, to the interrogatory: "Have you a hernia; and if so do you promise to always wear a properly adjusted truss?" answered in the negative, as to having a hernia. And yet, the lady in question was at that time "ruptured" (i. e., had a hernia) and it was proved beyond doubt that her death was the direct result of strangulation of that same hernia.

Upon application of the beneficiary named in her certificate for payment, same was promptly refused and the case came to trial. The court held that "there was no negligence on the part of the insured in not having mentioned the existence of the swelling in the groin, since persons without medical knowledge could not be expected to know that it was material, and that as the answers were not warranties, the policy was not avoided."

While in this judgment, the doctrine of irresponsibility from ignorance seems rather overdrawn, the facts,

the results, stand and this case but points out to the present medical examiner for insurance the special effort he should put forth to elucidate the meaning, the intent, of the several interrogatories upon each and every application blank filled out and signed by him.

As another instance: But recently, I have sent to a local orthopedic specialist, two cases of very serious lateral curvature of the spine. Both were children of parents almost foolishly solicitous of their offspring's welfare and both most amply able and willing to pay any reasonable fee for professional services rendered their families.

But, these parents were, so far as it is possible for parents to be, absolutely ignorant of the meaning, the intimation, in this deformity. In fact, in both instances, it was by mere accident that said deformities were discovered at all or that "something" was "believed" to be "wrong". And this "something wrong" was confirmed by my examinations; but almost too late in the one and surely too late in the other case to effect anything more than a possible estoppal of the said deformities.

Now, these cases, as you must know, are not related here to show just how ignorant the average layman is of his offspring's bones; but these cases are simply examples of persons, honest to the core but hopelessly ignorant of the full meaning of such terms as are used in some medical examination blanks and upon whom all medical examiners should apply their powers to explain the meaning, the full intent, of the various interrogatories found in all applications for insurance; which same elucidation would, without doubt, prevent many unnecssary litigations simply through having produced absolutely truthful, as well as honest, answers to the same; and, oftentimes, caused the rejection of an applicant apparently honest in his answers yet wholly untruthful in same.

As an instance: The parents, just mentioned, fully believed their little ones in sound health and undoubtedly would have so answered to a medical examiner were they applying for insurance upon the lives of these little ones, and they would have so answered honestly, or to their best knowledge and belief, and almost any court would so hold and would hold the company, society or order as liable (though the medical examiner believed and stated that he believed such deformity almost proof positive of a tubercular diathesis) and these honest answers would have been untruthful and lay the company liable and make doubly painful the discovery by the parents that all was as wrong as wrong could be at a time they honestly believed their little ones to be in sound health.

There is no doubt in my mind but many such persons honestly answer insurance application blank's interrogatories quite contrary to the truth; in fact, absolutely incorrect, were the facts but known.

Of course it would be absolutely unreasonable to hold that, to answer affirmatively the interrogatory: Are you now in sound health means that the applicant is absolutely free from all tendency to disease; and the courts would not so hold, rigidly or literally; for, while health is, theoretically, exemplified perpetual motion in molecular changes in full accord, it is manifestly absurd to expect the laity to understand the "absence of health" or "disease" as anything excepting, to them, a consciousness alone that "something is wrong" in them and that this negative consciousness alone implies, to them, sound health; or that "that something" which, when present in them, they readily recognize as "illness" or "disease" is not now present and that the absence of

this "something" in them now causes them to believe themselves to be in sound health.

The question: "Are you now in sound health" is very similar to the one propounded the small boy at school in that it is undeniably easier for the average layman to answer, as did the boy, negatively; for the average layman recognizes sound health through the absence of that something which, to him, is not sound health. It was the same with the little fellow who, being asked to define salt, answered: "Salt is that stuff which when you don't put it on potatoes makes 'em taste bad."

Most persons undoubtedly know when they are "in sound health" only by realizing that, physically speaking, there is nothing wrong with them; that they are not feeling "ill"; and, fortunately for insurance companies and fraternal societies and orders, few, knowing themselves in poor health, apply for insurance. Yet, when these few do apply, it behooves the careful medical examiner to be on the qui vive; and there are some, knowing themselves in danger of early death, will apply for that protection for their families they should have applied for earlier when they could have truthfully as well as honestly answered the questions of the medical examiner and been accepted by the society or company.

"KEEP YOUR WEATHER EYE OPEN."

Every medical examiner should be a careful medical examiner; and every medical examiner should always be on the qui vive. And it is a pleasure to know that many have believed most medical examiners to be just this kind; or, just as one writer on this subject puts it: "It is a truism to remark that the whole fabric of life insurance depends upon the fidelity, the learning and the skill of the medical men."

"When a company is formed, a lawyer may carefully draw its charter by its by-laws, and formulate the contracts upon which it is willing to enter; the actuary may accurately estimate the risks to be encountered, the rate of interest to be expected, and the loading necessary to cover expenses; the executive may organize with skill and economy the working force and the agents in the field; but, unless the medical examiner does his duty in barring out undesirable risks and accepting only those who may reasonably be expected to live out the theoretical expectation of life, the company is predestined to loss and ruin. He stands as a sentinel at the gate to prevent the ingress of those who would only destroy the structure, and upon his vigilence and care depend its existence. Any lapse from the strict performance of duty, any concealment of facts which the company should know in order to estimate properly the risk to be assumed, and any approval of doubtful lives from motives of personal friendship or unwillingness to incur local enmities, is to admit a traitor to make a breach in the growing edifice which may easily result in its total downfall."

Let us study carefully the true meaning, the full intent of all the interrogatories upon all application blanks for insurance placed in our keeping, and then see to it that every applicant fully comprehends this meaning, this intent, and litigations against insurance companies and fraternal orders and societies will be materially lessened in number, much money will be saved honest though ignorant applicants (who, many times, should not have been accepted for insurance) and a better feeling prevail between man and man.

Many a case of indigestion is due to poor teeth; examine your patient's teeth.

PHYSICS OF THE X-RAY.

By Dr. Gordon G. Burdick, Chicago, Illinois.

Chief Surgeon Peoples' Hospital; Professor Radio-Therapy and Photo-Chemistry, Illinois School Electro-Therapeutics; Associate Professor Surgery, Post Graduate Medical School; President Chicago Electro-Medical Society.

The physics of the X-ray must date back to the marvelous conception of the Greek philesopher, Thales, 500 years before the birth of Christ.

In the mind of this man was born the basis of modern scientific thought. This man conceived the idea that all matter possessed a soul similar to that of animals. He observed the peculiar but regular order of crystalization to be found in all solids, and came to the conclusion that the phenomena could be accounted for only on the theory that matter possessed an intelligence of a lower order than observed in the animal kingdom. He endeavored all his life to find means to prove his theory, but not until he came into possession of a stick of amber did he find any facts to justify what was to the world at that time an absurd theory. He found that by rubbing the amber rod by different substances that the rod behaved somewhat like its human cousins. By rubbing it with silk it would reject light bodies with a snapping sound, maintaining to all appearances, symptoms of anger, while its spirit was appeased by rubbing with other substances, and light bodies would adhere to it, showing, to Thales' mind, that matter can appreciate kind treatment. This experiment born of the molecular theory brought into the world a new force, which has been known by the general name of electricity.

Galvani and Volta had to make their discoveries before the scientific mind of Davy's assistant, Faraday, could investigate this mysterious force and determine its laws. This scientific worker experimented with the electric current in the bell jar of an air pump, and discovered that a change took place when the air was exhausted, and farther that the change was more pronounced the farther the exhaustion was carried until all appearance of a spark would disappear, and a glow would replace it in the jar. He found that the farther he carried the exhaustion the less resistance was offered to the current. His paper on the subject attracted the attention of Geissler, a glass blower of a scientific turn of mind, and he conceived the idea of constructing tubes from different glasses, and sealing into them various fluids, gases and salts, and found that the current when passed through a tube, of this character, emitted colors characteristic to each substance used. He turned his attention principally to the decorative construction, and amused and instructed thousands by the wonders of his creations, and in no small degree deserves the gratitude of the world by forcibly directing the attention of scientific minds to this fascinating problem.

Hittorff, attracted by Geissler's works, perfected the mercury pump, and carried the exhaustion farther, and found that at a certain point the bluish glow was replaced by an apple green light. He discovered and antedated Sir William Crookes by about twenty years; but his discoveries were lost to the world by the choice of an unfortunate name for his works, which he called "The Electric Rays in Gases.

Sir William Crookes startled the scientific world by the claim that he had discovered a new state of matter, which he called "radiant", and carried out a classical series of experiments to prove his contentions. He conceived of matter as existing in a very attenuated form.

Before considering Crookes' work a

few minutes might be profitably spent in reviewing the present conception of the molecular theory. All matter is regarded by scientific minds as being made up of a series of bodies called molecules. Molecules are of various sizes, and the size of each molecule depends upon the number of smaller bodies it contains, which are called atoms, formally regarded as indivisable parts of matter, but since the farther investigation of the electric current, in vacuum tubes, it is found that the theory will not fit the phenomena observed, therefore, scientific men have again divided up the atoms into a series of bodies called corpuscles. To these bodies are ascribed the peculiar property of taking on and parting with polarity, and it is due to the presence of these bodies that another property is ascribed to the atom, that of motion. The corpuscles being susceptible to a great range of ether vibrations, keeping them traveling at an enormous speed, and it is to these bodies that chemical combinations are possible under the application of certain forms of energy, as heat, cold, light or electricity. These bodies may be made to assume a definite rate of vibration, and will emit wave lengths that appear as colors to the human eye, and will form chemical combinations under these conditions.

The atomic weight of elementary matter depends upon the number of corpuscles each atom contains. Atoms are always an elementary substance, while the molecule is always complex. For instance, take a molecule of water, which contains three atoms, two atoms of hydrogen and one of oxygen, and then again a molecule of albumen, which may contain as many as 35,000 atoms derived from several elementary sources.

We are just beginning to understand the forces of the under world, and appreciate the wonders connected with the primeval dust with which the Creator wrought.

Sir William Crookes in carrying out his experiments with the vacuum tubes, improved the mercury pump, and obtained an exhaustion of over a millionth of an atmosphere, and found that the phenomena observed in the tube changed. He first observed that the color of the tube changed from a blue to a green. By curving the cathode he brought the cathode ray to a sharp focus upon a piece of platinum and demonstrated that the stream was made up of solid particles, and that they were of a definite weight, and traveled at an enormous velocity, and could deliver an appreciable amount of energy when suddenly arrested in their flight, bringing the platinum to incandescence in a short time. By constructing a rotating vane in a tube, and deflecting the cathode ray by means of a magnet, he caused it to rotate in either direction at will, thus demonstrating that the stream was made up of solid particles that could deliver considerable energy. By placing in the path of the cathode stream a piece of refractory metal in the shape of a maltese cross, he demonstrated two facts: first, that the cathode stream would throw sharp shadows, and second, that the stream was arrested by heavy pieces of metals. He constructed a tube in such a manner that he demonstrated the fact that while the anode stream could be made to turn a corner, that it was impossible to make the cathode do the same. Next, by continuing the pumping process farther he found that the resistance of the tube to the passage of the current gradually increased until a point was reached at last where the current would spray over the tube rather than through it, thus proving that particles were necessary for the passage of the current. He sealed into the highly exhausted tube a bulb containing potash, and demonstrated

that the current would again pass through the tube by heating the potash, and driving off the moisture it contained, while the tube regained its former high vacuum by the potash again absorbing the moisture that had been freed by heat. By constructing the cathode of tin, and placing in the path of the ray a cross of metal, he demonstrated the fact that great quantities of ionic metal were torn off from the cathode electrode and deposited upon the opposite walls of the tube, proving that solid particles could be carried through the tube. This last discovery of Crookes is of the utmost importance to us, as X-ray workers, and will be seen as we get farther along.

Crookes found that the cathode ray when directed upon many substances would cause them to flouress, and found that different substances would vibrate at a different rate, and emit colors that were characteristic of the substance used.

While Crookes did not succeed in maintaining his new theory, he forcably directed attention to this fascinating subject, and the investigations were carried on by Prof. Hertz, better known as the discoverer of the "Hertzian Waves", now used in wireless telegraphy. This investigator sealed into a tube a piece of thin metal and backed it with photographic salts, and demonstrated the facts that the cathode ray had photographic properties, and also that it would pass through thin pieces of metal.

The untimely death of Prof. Hertz left his pupil, Paul Leonard, to complete the experiments of his master, and he sealed into the tube opposite the cathode an aluminum window and brought the cathode ray outside of the tube, and demonstrated that it was the cathode ray, because it would reduce photographic salts, cause flourescence and could be deflected with a magnet. He found that the ray was absorbed by the atmosphere after passing four inches from the tube, and farther, he sealed another tube opposite to the aluminum window and exhausted it to the highest Crookes' vacuum, so there were not enough solid particles in the tube to cause a glow when connected to the electric current, and found that the cathode ray would pass unobstructed to the limit of the tube of about four feet, without loss of energy, as determined by means of its flourescent properties upon some crystals sealed into the tube upon a piece of iron, in order that it might be moved along from place to place, by means of a magnet outside of the tube, proving that the cathode stream can travel in the ether without loss of energy.

It was while Roentgen was carrying out Leonard's experiments that he accidentally discovered the mysterious radiation known as the X-ray. He placed a Leonard tube in a black cardboard box in order to exclude all the light from the room, and was amazed to discover the beautiful apple-green light emitted by a barium-platinum cyanide screen, laying a short distance from the excited tube, and found that the flourescence could be detected about four feet from the tube. He was very much surprised upon placing his hand behind the screen to see a beautiful outline of the bones shown upon the screen.

The photographic properties were discovered under nearly the same conditions by lying discs of metal over a photographic plate. He found it necessary to place his fingers over the plate for some purpose, and was astonished to discover upon development that the bones of the fingers were shown.

Roentgen was a shrewd enough observer to realize that he had made a new discoveay, and one contrary to all scientific reasoning up to that time. He thought that he had discovered

some new form of light and endeavored to make it conform to the well known phenomena of light. He used prisms of glass, metals, crystals, vulcanite and fluids of all kinds, trying to make it obey some law of refraction, without result, except from a prism of aluminum, when a slight indication of refraction was noticed. He left the question open, however, for future observers. He found that by placing behind a photographic plate discs of various metals that the image of the metal was impressed upon the plate, but what astonished him considerably was the fact that it did not make any difference whether the metal was polished or not, but he found that the heavier the atomic weight of the metal to be, the more strongly was the image impressed upon the plate.

We now know that it is not a reflection in the true sense of the word, but we have found that the X-ray coming in contact with any refractory metal will cause its corpuscles to vibrate and give off a ray similar in character to the X-ray, and the ray is given off in the same plane as the source of energy is received.

We have since found that it does not make any difference, even if a large dictionary is placed between the plate and the metal disc, the image will be found very sharply impressed upon the plate. It is this peculiar phenomena that prevents us from getting sharp skiagrams of the pelvis and trunk with a rapid series of interruptions. The rapidity with which the ray travels through the tissues cause the tissues to vibrate, and it gives off rays similar in character to the X-ray, and destroys all sharpness of image. This phenomena can only be overcome by using a slow series of interruptions, when the so-called reflection disappears, from both the metal experiment as well as from the attempt to skiagraph the trunk. This condition is never found with a slow series of interruptions, and is quite characteristic of the so-called turbine mercury break. I was never able to detect this reflection where the period of interruptions was kept below 500 times a minute. This is of practical importance as few interrupters are owned outside of a few large laboratories that are under control sufficient for good body work. Experts vary the period of interruptions according to the muscular development of the individual. The Wehlnult electrolytic interrupter is the only exception that I know to the rule; frequently success may be obtained in body work with this type when properly constructed, and the success is undoubtedly due to the clearness and sharpness of the interruptions obtained with this instrument, a success that is not possible with even the best constructed mercury break.

Now we come to the important points that concern us as X-ray workers. The literature on the subject is filled with misinformation until it is really puzzling for an expert to determine just what a writer may mean in a given case. We are constantly reminded by writers that they are using a low, medium or high tube, the quality of the tube being determined by its flouroscopic image and not photographically, and these terms are supposed to relate to the degree of exhaustion of each tube under discussion, but as a matter of fact, exhaustion has little to do with it, after the line has once been passed, but depends upon the speed of the hydrogen corpuscles, and their speed in a properly proportioned tube is determined by the electro-motive force of the apparatus.

If the relation of the cathode to the anode is such that the cathode stream cannot travel without interference, the tube will always appear low, regardless of the degree of exhaustion after the line has once been passed, while by changing the construction by bringing the anode at just the proper point

in the cathode stream and the tube will appear invariably high. The apparent vacuum of the tube depends upon the speed of the hydrogen corpuscles and that is determined by the electro-motive force of the current.

Expert operators are now using tubes for radio-therapeutic work that are below the line—in other words, these tubes do not give off X-rays when connected in series with the generator, as the tube is so low in resistance that it practically short-circuits the apparatus, and in order to increase the electro-motive force, artificial resistance is placed in the path of the current, and that is accomplished by putting in series with the tube spark gaps, varying the size of the gap according to the degree of penetration required, for each individual case. For treatment of diseases of the skin, we usually require a gap of a quarter of an inch upon each side, giving the lowest possible vacuum with just sufficient penetration to pass through the skin, while for the treatment of disease located within the body, we use a spark gap upon each side of about one inch to one and one-half inches, depending upon the depth that the disease may be located. By this means, we are able to deliver the energy of the ray at just the point where we desire a change to take place. Many operators would be very much more successful with their method of treatment, if a patient were located ten or fifteen feet from the tube, as the ray is used of such a high degree of penetration that the energy is not absorbed while it is passing through the body.

It is found in practice that a constant change in vacuum is taking place in an X-ray tube, the exhaustion becoming more pronounced from day to day as the tube is used, and you will recall the ionic shower sent off from a cathode which was demonstrated so beautifully by Sir William Crookes, by constructing a cathode from tin, which leaves a black deposit upon the walls of the tube. This shower is thrown off from all metals, but the deposit is practically invisible when coming from a pure aluminum electrode, and that is usually the metal selected for the construction of this important part of an X-ray tube. I well remember the astonishment of the Edison Lamp Co. several years ago, who constructed a very expensive tube according to my specifications, and instead of using aluminum as directed, notified me that they had went even better than their contract and had made me a cathode from platinum. This tube, when placed upon the coil for about twenty minutes, became one of the most beautiful platinum mirrors I have ever seen, and after it had been in use for several hours, the layer of platinum became so thick upon the inner walls of the tube that the X-ray could no longer find an exit. The same process takes place with the aluminum cathode, but is not visible to the eye without the metal is contaminated by cadmium, when a purplish cast may be noticed by viewing the tube by means of transmitted light. Now, this ionic shower under the influence of the electric current, forms chemical combinations with the free hydrogen corpuscles in the tube, and we have a metallic layer constantly deposited, which becomes thicker and thicker the longer the tube is in use, and it is just at this point where the average operator gets into trouble. Those operators who have only one or two tubes which they use for display purposes, as well as for the treatment of various cases that come in, gradually become converted to the theory that the X-ray is not capable of doing harm. They have been going on steadily plating their tube from day to day, until eventually nearly all of the photochemical rays emitted by the tube are absorbed by the metallic layer, and

they think that the warnings that have been sent out from large laboratories from time to time are without value. But eventually, there comes a time when the operator breaks the tube that he has been using for all purposes and invests in a new one, and placing all of his patients under the same technique as he has previously used with his old tube, and much to his surprise, develops several very severe necrotic X-ray burns before he begins to realize that there is something wrong. Now, we can readily understand that when the ray has been forced to traverse a considerable thickness of metal, and I have found by actual experiment in old tubes, as many as nine grains of metal deposited upon the inner wall of the tube to each square inch, it is easy to understand that a tube used under these conditions is absolutely safe so far as producing any irritation is concerned upon the human body. It is also easy to understand that prolonged exposure with a tube of this character is a perfectly safe procedure, but I wish to warn all of you to beware of a tube that has not been used, as in many cases, as little as twenty minutes' exposure will bring about a severe burn.

The constant consumption of hydrogen corpuscles going on inside of the tube require some method that they may be restored from time to time in order that we may work under the same conditions all the time. This is usually done by means of a contrivance called regulators. These regulators are made in various ways, and serve the same purpose and the advantage of each is simply a question of refinement. Nearly all of the imported regulators are constructed from mica, or graphite, which under the influence of the negative pole, throws off showers of hydrogen gas—or in one of foreign forms in use, another fact has been taken advantage of, which has come to the notice of physicists since the discovery of the X-ray, and that is the property of all metals of absorbing gas, being one of the most difficult problems to overcome in the construction of an X-ray tube. As was found in an earlier day, that the heavier anodes would frequently give off sufficient gas upon using the tube the first time to destroy its vacuum. Therefore, the Gundlach people, taking advantage of this physical fact, sealed into the tube a piece of pallidium wire, which metal absorbs enormous quantities of gas, which may be driven into the tube between its molecules by means of artificial heat outside of the tube and again reducing its vacuum to a low point.

There are many of these regulators that are very promising, but none that are absolutely reliable. The ordinary tubes after they have become too high for use, because of the destruction of the hydrogen corpuscles, they may be again recovered by taking advantage of another well known physical fact—that while the corpuscles will form chemical combinations under the influence of the electric current, it is an equally well known fact that those combinations are broken up by the application of heat. Therefore, if we take a tube which has become too high for use, and by wrapping it in fire felt and placing it in an ordinary oven and baking for an hour or so, then gradually allowing the tube to cool off without opening the door, we find that we have recovered our corpuscles and the tube may again be used for a considerable period of time. The baking process may be repeated a number of times, but eventually the tube will become useless due to the increasing thickness of metal on the inner walls.

(To be continued.)

Fluid extract hyoscyamus, or the alkaloid hyoscyamine, often relieves incontinence of urine.

Rundschau.

By H. Speier, M. D., Rochester, Minn.

THE DEATH OF CHRIST FROM A MEDICAL STANDPOINT.

It does not matter from which standpoint one looks at the events of which the only record is contained in our Bible, those to whom the man from Galilee is literally the Son of God and God himself, as well as those to whom he is just a man, consent that his earthly career embodies a tragedy, THE tragedy of human life, of undying interest for the human race. And thus it has been studied, with painstaking minuteness, in every aspect. The closing scene, the death of Christ, has attracted the attention of physicians. They have often discussed the question, to what pathological condition the death should be ascribed, without arriving at a really satisfactory solution. The discussion is reopened by the recently published book of a French author. Its importance lies in the fact that it contains a new document, unknown heretofore, purporting to be a letter written by an eyewitness of the crucifiction, only seven years afterwards. The authenticity of the letter can only be determined by the archaeologist. Perhaps it is a clever forgery. It certainly is in accord with scientific knowledge.

The writer, a member of the sect or fraternity of the Essenes to which Jesus belonged likewise, narrates events much as is done in the sacred book, but with greater detail and without any supernatural coloring. Overcome by the unusual heat of the day, such as always proceeds an earthquake, and weakened by the loss of blood from scourging, Jesus fell into a death-like faint. To the soldiers and other bystanders he appeared dead, not so to his friends, the Essenes, particularly, when from the slight wound made by the lancethrust there issued a bloody flow. Their medical knowledge told them that it could not come from a dead body. Under cover of darkness they removed him to a cave, where they applied wound dressings and restoratives which in 30 hours brought him back to consciousness. Jesus died six months later from the effects of his exhausting experience and was buried on the shore of the Dead Sea.

What has puzzled physicians, the difficulty to account for death from apparently insufficient causes, is explained away by asserting that real death had not come, only a profound faint. It is not necessary to think with the author of the book of a cataleptic state, for enough had preceded to produce complete physical exhaustion in a person of neurotic organization.

SMALLPOX IN CLEVELAND.

The outcome of the smallpox situation in Cleveland has been watched with special interest, owing to the claim made for disinfection by the health officer, Dr. Friedrich, in his pamphlet "How we rid Cleveland of smallpox." Now, two years after the publication, results are summed up by the "Sanitarian" for May. It says, that in August 1902 another outbreak occurred and gained epidemic proportions, with a deathrate of 17.9 per cent. Many of the cases were of the most malignant form. But there was a wonderful drop immediately thereafter (Sept. 20.) How was this sudden ending of the epidemic of smallpox brought about? By vaccination,

with, of course, isolation of the patients. About the first of August 1902 the health officer appointed 170 physicians as public vaccinators. The vaccine virus was furnished by the health department and each lot of virus was examined to insure its purity. Public vaccination began August 15, 1902. The number of vaccinations paid for by the city in 1902 was 195,000 in round numbers. Cleveland is now again practically rid of her smallpox.

Thus a fresh demonstration has been furnished of the claim that disinfection alone, no matter how thorough, cannot stamp out smallpox, but that systematic vaccination is necessary for it. The antivaccinationist, of course, will not be convinced, but persist in his nefarious warfare and continue to falsify facts and statistics. The pertinacity of these fanatics almost deserves admiration. Nothing seems able to shake their conviction. The secretary of the Minnesota antivaccination league died during the winter of malignant smallpox. But the vigor of their campaign did not slacken and they succeeded in pushing through a bill favorable to their aims.

A SUCCESSFUL MEDICAL STRIKE.

Every German community, from the largest city to the small village, has corporate societies for the sole purpose of furnishing to members medical attendance at low cost. They employ physicians, who enter into contract to give medical service at stipulated reduced rates. The administration of these societies (Krankenkassen) is regulated by law and closely watched by the authorities. Recently, some modification of laws gave the corporations in Bavaria a chance to change their medical fees in a manner unsatisfactory to the physicians. The matter was taken up by the medical district society of Munich—these societies have an official character in Germany—and it declared all such medical contracts void. As the beneficiary organizations threatened to retaliate by importing physicians from the outside, the outside medical societies were brought into line and physicians made to agree not to accept one of the boycotted places. The test came soon. In a certain city the Krankenkasse was unable to furnish satisfactory medical service and numerous complaints were entered. Thereupon the government stepped in. Having given a few days' grace it re-engaged the former physicians with an increase of pay, as demanded by the medical societies.

The occurrence might teach us a profitable lesson. Someone will perhaps cry out against the "commercialism" of it. But is it not about time to break away from old fogy idealism and adopt common sense notions in keeping with the realism of the day? All national life is dominated by the commercial idea. We are confronted by concentration of industrial efforts, organization of capital and labor for mutual protection and increased effectiveness. It is the spirit of the age and we must keep up with it, if we do not want to drop behind our age. If we try to uphold a medieval standard of professional dignity, we must not complain, if we starve in good medieval fashion. The action of the German doctors, dictated by good business sense, has not been thought in that country derogatory to professional dignity. And yet they have there some rather strict notions, as shown by a recent decision of a high tribunal, that the sale of a medical practice is incompatible with the dignity of the medical profession.

We need badly in our country effective medical business organization with power to enforce its mandates both on members and laity. Call it a union, if you please. No need shying at the name. In union there is strength; without it our social position becomes more and more precarious.

ALKALOIDAL THERAPEUTICS

Original articles, reports and notes on dosimetry are desired for this Department.

ALKALOIDAL NOTES.

GLONOIN.

By W. P. Hough, M. D., Columbia, Louisiana.

Glonoin or nitroglycerin, also called trinitrin, is a valuable remedy in dosimetric practice. The usual dose is $\frac{1}{100}$ grain. The effect of glonoin is similar to nitrite of amyl, but is more permanent. Its physiological effects are very remarkable, in a few moments after a dose is taken the face becomes flushed, with fullness, and throbbing of temporal arteries, the patient complaining of fullness in brain and headache, due to the temporary flushing with blood. Glonoin dilates the capillaries, strengthens the heart, and is our best quick stimulant in all forms of heart failure. A case or two which came up in my practice will illustrate the practical utility of this potent remedy.

M. G. came to my office recently with following history and symptoms: Four or five months ago he suffered with rheumatism of the left knee, since which time he has at intervals suffered with his heart, difficult breathing and great weakness. On examination I found an extremely weak pulse, heart sounds scarcely audible with stethoscope; during the examination a paroxyism of heart failure came on, breathing quite difficult. I immediately gave him one granule of glonoin $\frac{1}{250}$ grain, requiring him to chew it and swallow slowly. I repeated this every five minutes until I had given three granules. I had scarcely given the third granule when all symptoms of heart failure vanished, patient remarking that his breathing was very much better, the pulse had become strong and full, the heart sounds now being heard plainly with stethoscope.

Case No. 2.—Not long since, hearing the familiar "Hello!" about 2 o'clock at night, I yelled out: "Who's that?" "It's me, doctor, and I've run my horse three miles. Want to get you to see a lady mighty bad off. Can't get her breath, and may be dead by this time." I knew the lady well and had treated her for valvular trouble, so I told the man that I would send a remedy which would relieve her if anything would. I put up a few granules of glonoin $\frac{1}{250}$ grain (Abbott Co.'s) and directed him to dissolve a granule in a third of a teaspoonful of water, and if patient could not swallow, to pour it into her mouth and repeat every five minutes until three or four granules were given if necessary. Next morning the man informed me that the second dose did the work but that he gave four doses for good measure; that after giving the second dose the lady opened her eyes, took a deep breath and said she felt better, and in a few minutes more sat up in bed. Now, a short while before this her condition was most critical, cold extremities and almost unconscious. To sustain the action of the glonoin I directed one to be given every three or four hours and placed her under, digitalin $\frac{1}{67}$ grain, strychnine sulphate $\frac{1}{50}$ grain, three times daily, from which she improved steadily.

By dilating the capillary vessels of the brain an attack of epilepsy can frequently be cut short by this remedy, though it is not a safe remedy to use in aged or plethoric individuals. The granules containing $\frac{1}{250}$ grain is the safest and best method of administering this excellent remedy, given from five to twenty minute intervals.

Colchicine granules are useful in rheumatism.

DISCUSSIONS.

This Department contains each month case reports, letters, inquiries and replies from our readers. If you have a case you would like some help with, or a question to ask, write to us and we will publish it in this Department and you will get the opinions of our medical brethren. When you have an interesting case, write a report of it and send it in and it will help some one else. We need each other's counsel so let us help each other from our experiences. Letters are desired from physicians on any subject pertaining to our profession.

GUAIACOL.

Guaiacol is a colorless, limpid, oily liquid, characteristic aromatic odor, soluble in alcohol, glycerine, fixed oils, ether and two huudred parts water. It is antitubercular, antiseptic, antipyretic, alterative and local anodyne. The dose is two to three drops, which can be gradually increased up to fifteen drops. Give diluted with brandy or wine after meals. Dose externally over the abdomen as an analgesic and antipyretic, fifteen to thirty drops pure or with equal parts of glycerine or oil. This remedy has been used internally in malaria with good success, in doses as much as forty-five drops after meals. As much as forty drops have been used over the abdomen three times a day with good success in malaria, and when the stomach is irritated during malaria the external use of this remedy should not be lost sight of. When prescribing this remedy it must be remembered that it must be used with great care, both internally and externally, as it is a dangerous remedy when too much is used either way. In toothache, when the tooth is hollow one drop on cotton put in the tooth will generally relieve it, but as much as two drops in a hollow tooth have produced poisonous effect. In earache it should be diluted with equal parts of olive oil and two drops put in the ear. The external use of guaiacol gives satisfactory results in relieving most pains. Besides, it is used externally over the chest in tuberculosis in infancy and childhood. In continued fever its external use over the abdomen will satisfactorily control the temperature, and it is used externally in abscesses, epididymitis, orchitis, gout, neuralgia, neuritis, pleurisy, pneumonia, rheumatism, and applied on the tonsils with equal parts of olive oil in tonsilitis. It is also used externally as well as internally in bronchitis, cystitis, diarrhoea, mumps, peritonitis, etc. This remedy has a wide range of action in many diseased conditions and should receive more attention and be used more often than it is at present.

J. A. Burnett, M. D.
Brawley, Ark.

STATE MEDICAL SOCIETY OF WISCONSIN.

The annual meeting of this society was held at Milwaukee June 3, 4 and 5. A scientific program of unusually good papers made the meeting of special interest. The social features were not neglected, so that the physicians of the state enjoyed a pleasant as well as profitable meeting. The following officers were elected:

President, Dr. F. E. Walbridge; first vice president, Dr. James Mills, Janesville; second vice president, Dr. C. C. Gratiot, Shullsburg; secretary, Dr. Charles S. Sheldon, Madison; assistant secretary, Dr. Arthur T. Holbrook, Milwaukee; treasurer, Dr. Sidney S. Hall, Ripon; delegate to the house of delegates, American Medical Society, Dr. E. E. Evans, of LaCrosse.

As a result of the pronounced attitude of the state society in relation to the bitter warefare between the two Milwaukee county medical societies, it is hoped harmony will now prevail in Milwaukee. Instead of a contest between the two societies for recognition there will be but one united society, the Medical Society of Milwaukee county.

The Wisconsin Medical Recorder.

A Monthly Journal of Medicine and Surgery, devoted to the best interests of the whole profession.

J. P. THORNE, M. D., Editor and Publisher, Janesville, Wis.

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Original Articles are solicited from our readers. We wish articles which are sent us to be contributed exclusively to this magazine. We will send the writer of any original article, if desired, twenty-five extra copies of the number containing the article. We are also willing to send copies to the professional friends of the author.

Letters, Case Reports and **Questions** are desired for our Discussion Department.

Society news and reports and items of interest are gladly received.

Vol. 6. JUNE, 1903. No. 6.

EDITORIAL NOTES.

"Beautiful Certificates" for adorning the walls of doctors' offices are becoming almost as numerous as the leaves of the forest. In fact there is little need of investing in paint or wall paper, as a little investment will cover the office walls with documents which are to impress the patients with the doctor's great wisdom. A hospital recently opened in Chicago has sent circulars broadcast offering to appoint physicians on the staff and to send a certificate for framing for $25.00. Dr. John B. Murphy's name appears on the circulars of this concern as chief surgeon but he says this use of his name is entirely unauthorized and he has commenced suit against the concern for so using his name. A law school in Nashville is offering to confer an honorary LL. D. on physicians and send a beautiful certificate for $10.00. Other institutions of the same class are offering degress and diplomas for a consideration, so that degress and certificates for framing are becoming almost a drug on the market.

Doctors give away more than any other class of men on earth. It is stated the gratuitous services of physicians last year to one large Philadelphia hospital amounted to over $500,000 at ordinary fees. If any individual or any society had given a half million dollars to any cause the fact would have appeared in all the dailies with large headlines, but this free work of physicians has come to be considered as too common for notice. And this was only one hospital in one city. How enormous this free work in the whole country must have been last year. Much of this free work was necessary and commendable and much of it was not.

Never get in debt is good advice sometimes and sometimes it is not. If a man is falling behind current expenses and getting in debt it is certainly bad and he should curtail expenses so as keep within his income. If, however, a man is making every year something more than his income it is often a good plan to go in debt for some piece of real estate or some gilt-edged security. Then he will avoid needless expenditures until that debt is paid. Some well known men have become wealthy by this practice of getting debt for good investments.

A leading article in the July issue of the Recorder will be one of the most important articles of the year's medical literature. It is on Tuberculosis of the Mammary Gland, by Dr. Thos. H. Manley, of New York city. The article will be illustrated with six full page plates especially drawn for this paper,

THE DOCTORS' WORLD.

Therapeutic Briefs, Medical News Items, and Clinical Notes on Medicine and Surgery.

The Largest Bottle in the World.—The largest bottle ever made in the world was recently blown by the Illinois Glass Co. at Alton, Ill. It is 6 feet 2 inches high and holds 45 gallons.

Adrenalin in Anesthesia.—Many reports indicate that adrenalin is a most potent remedy in cardiac depression during the administration of an anesthetic. It can be placed on the tongue, given hypodermically or even by intravenous injection.

Dr. Hudson.—Thomas J. Hudson, LL. D., the great authority on psychology, died at his home in Detroit, Mich., May 28, from angina pectoris. As a lecturer and author he had an international reputation. His work, "The Law of Psychic Phenomena," is considered one of the best works on suggestion in print.

A new book by him, "The Law of Mental Medicine," has just been issued.

Wood Alcohol.—The frequent reports of serious consequences from the use of wood alcohol are becoming so common as to warrant the adoption of measures to prevent the too free use of this poisonous preparation. The ingestion of very small amounts of wood alcohol has caused serious and even fatal results. Inhaling the vapor has caused serious trouble in some cases. It has a powerful effect upon the intestinal canal and the sensorium, shown by headache, vertigo, delirium and dilation of the pupils. It has profound effect on the eyes, causing an optic neuritis and often subsequent optic atrophy. The public should understand that the ingestion of wood alcohol, its external application or inhaling its vapor is dangerous and may cause incurable blindness and even death. Physicians can do much to educate the people in this regard. The fact that wood alcohol is about a dollar a gallon cheaper than grain alcohol makes it a temptation always for the unscrupulous to substitute it. The government should place a tax on it which would bring the cost up so that there would not be the temptation to use it. A large manufacturer of flavoring extracts tells us that unscrupulous manufacturers of such household preparations are using wood alcohol in their products. This is something which should be investigated. Laws should be passed requiring all preparations containing wood alcohol to have a poison label on the container.

Mortality Statistics.—The registration of vital statistics is a most important subject, as much of sanitary science is based upon it. In order to understand and treat disease we need to know about the prevalence of diseases, their distribution and be familiar with the causes of death. A careful registration of causes of death yields much valuable information. For instance, such statistics show that in the last few years cancer has been rapidly increasing in all civilized nations, which are all striving to ascertain the cause and perfect the cure. The United States Census Office has recently started to secure a more satisfactory system of registration. We

have received the following pamphlets just issued by the Division of Vital Statistics:

Legislative Requirements for Registration of Vital Statistics, including resolutions of Congress and the American Public Health Association, and a specimen form of an adequate law.

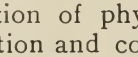
Practical Registration Methods. Use and treatment of the Standard Certificate of Death to secure the best results. Information for registrars.

Relation of Physicians to Mortality Statistics, with special reference to the statement of causes of death and other details essential to accuracy and uniformity.

Medical Education in Vital Statistics, suggesting to medical colleges a special course of instruction for students upon registration and statistics.

Manual of the International Classification of Causes of Death, designed for use of officials compiling statistics.

The Manual is a work of 177 pages, explaining the "international system". This subject is one worthy of the careful consideration of physicians. Desired information and copies of these documents desired may be obtained of W. A. King, chief statistician.



Elder Flower.—This is a remedy which is used in some households as a diuretic. It appears from recent reports to have virtues which should commend it to the profession. Dr. H. E. Randall writes in the Philadelphia Medical Journal: I do not know whether the medical profession in general is using elder flower for dropsical conditions. I have found it almost a specific in seven cases in which it was used. A few years ago I tried nearly everything on a case of anasarca with abdominal dropsy. The patient finally asked me whether elder flower was good for her condition. I told her I did not know; it might increase the flow of urine, but that I did not expect any permanent good from it; but, if she cared to try it, I would give her a prescription for it. I gave her the prescription, but her friends went to the woods, gathered some of the bark, steeped it and gave it freely, and the woman got well. I have since seen it used in several cases with success. Most of the text books do not mention it at all. I have been disappointed in the use of cathartics and diuretics for dropsical conditions. The amount of urine passed does not seem to influence the amount of fluid in the tissues. If water is withheld, the patient is as bad as ever when fluid is retaken. Fluid extract of sambucus canadensis in one-quarter to one teaspoonful doses, three or four times a day, comes as near being a specific as anything I have ever tried, whether the dropsy be due to heart, liver or kidney disease.

Dr. Beverley Robinson, New York, also says: I beg leave to say that the elder flower as a diuretic, referred to by Dr. H. Randall, is well known in France as being useful in this respect. In one at least of the services in a large Paris hospital it is given with notably good effects. In interstitial nephritis, to diminish excessive arterial tension when it is accompanied with threatening or annoying symptoms, an infusion, or decoction, of the bark seems preferable to the fluid extract prescribed by your correspondent. In some instances, no doubt, elder flower is more useful and less objectionable than nitroglycerine and the nitrites, when employed for a similar purpose. Unquestionably, in a fair proportion of cases, in which the quantity of urine is lessened and the specific gravity low, it increases both with advantage to the patient, viz.: It wards off menacing uremia and gets rid, in a measure, of serous effusions in the cavities and edema of the limbs. I am glad to corroborate Dr. H. E. Randall's personal experience.

CLINICAL SOCIETY PAPERS

Recurrent Sarcoma Cured by X-Rays, By Dr. F. M. Jeffries.
Paraffin Prosthesis for Saddle-Back Nose, By Dr. W. H. Luckett.
General Puerperal Septicemia, By Dr. J. H. Burtenshaw.
Extra Uterine Pregnancy, By Dr. L. J. Ladinski.

CLINICAL SOCIETY OF THE NEW YORK POLYCLINIC MEDICAL SCHOOL AND HOSPITAL.

Regular meeting, with the president, Dr. Alexander Lyle, in the chair.

RECURRENT SARCOMA CURED BY X-RAYS.

Dr. F. M. Jeffries presented a canary bird with an interesting history of recurrent sarcoma cured by X-rays. The bird was brought to him about seventeen months ago suffering from a small tumor in front of the right eye, and he was asked to make a diagnosis. The growth was removed under anesthesia and sections made in the usual way. The tumor was found to be a spindle-celled sarcoma of the small celled type. The removal of the growth opened the nares and a large part of the nasal cavity. Seven months later it was noticed that recurrence was beginning and the growth rapidly increased, involving more territory. The bird was first exposed to the rays for a very short time, one, two or three minutes, which was gradually increased to five, and finally to ten minutes at each treatment. A medium tube without a shield was used. The growth quickly diminished in size, and the inflammation about it subsided. The treatmeut lasted five months, when it ceased, and up to the present time there have been no signs of recurrence. Considerable cicatricial tissue is now apparent at the site of the neoplasm. The bird has a cataract of the right eye, and it is not known whether this existed previous to the beginning of the X-ray treatment. The theory is that its formation is independent of the X-rays.

Dr. J. A. Robertson said that he had employed the X-rays for the past five or six years, and, during the past few months had had an extended experience in the treatment of epithelioma and carcinoma. He emphasized the fact that if tubes of sufficient penetrating strength are used, a cure will usually result. This fact had been demonstrated in the case of the bird, in which medium strength was used, without a shield. Well-known authorities claim that neither sarcoma nor carcinoma should be treated with a shield. As to the cataract, the speaker thought it was probably the result of X-ray treatment, as, when he used the fluorscope, conjunctivitis developed in both eyes, and cataract might reasonably be supposed to result from this source of irritation, if sufficiently long continued.

Dr. W. H. Luckett said that he thought it rather soon to state positively that the growth had been "cured". He had seen many instances of so-called X-ray cures of sarcoma, carcinoma, etc., but the growths usually recurred. One such case was that of a women who suffered from a sarcoma of the scalp about the size of a goose-egg. She was treated with X-rays for about three months, and the growth was reduced to about one-fourth its original size, and a month or so later it entirely disappeared. He did not see the patient for two months, when she presented herself at the dispensary with the

tumor as large as it was when first seen, and it was suppurating. Cachexia soon followed and death supervened. In his opinion it is wrong to work without a shield. Dermatitis often results from the use of X-ray, and the radiographist must stop work for months at a time and not even go near the machine. The speaker also mentioned a case of epithelioma of the cavity of the mouth. The diagnosis was made from a section and a Ferguson speculum was introduced into the mouth, and the patient was treated in this manner for four months by the radiographist to the hospital, but, despite the fact that he received very careful attention, the patient is dead.

Dr. Jeffries closed the discussion by saying that in regard to the selective power of the X-ray, the present case was an instance in which the entire body was exposed, as it was impossible to concentrate the rays, and, except one instance in which the bird's feathers were burned from over exposure, there were no ill effects.

PARAFFIN PROSTHESIS FOR SADDLE-BACK NOSE.

Dr. W. H. Luckett presented two photographs of a patient who had been treated with paraffin prosthesis for saddle-back nose. One was taken previous to the treatment and the other after the injection. The latter showed great improvement in the patient's condition. He prepares his own paraffin, using the ordinary paraffin of commerce, and reduces the melting point by mixing with the liquid petroleum of Schieffelin, which gives a clear white solution. He considers the fluid injection method of using paraffin the best. He employs the ordinary aspirating syringe of Tiemann for the injection. The paraffin, at a melting point of 105 degrees F., is drawn into the barrel of the syringe, and the syringe placed in a 2 per cent solution of carbolic acid heated to 120 degrees F. This is done to keep the paraffin from solidifying. The subcutaneous tissues will stand 120 degrees of heat without injury. This maneuver prevents the needle from becoming plugged up and avoids the formation of a solid column of paraffin. The needle is inserted and the paraffin injected rapidly. The injection in this case was made by inserting the needle under the tip of the nose and carrying it up to the brow. There are three points which it is necessary to compress in order to keep the paraffin in position, and this was accomplished by having his assistants place their fingers at these points. The speaker saw one case in which 15 or 20 minims of paraffin had to be removed. There has been a great deal of talk about paraffin being replaced by connective tissue in these cases. A correct explanation of the histologic arrangement of the elastic tissue fibres shows that they run in ever direction, crossing each other, and enclosing between them spaces filled with fluid, these spaces connecting one with another. Several cases have been reported in which, on the removal of a section in which paraffin had been injected, the connective tissue seemed to be growing through the paraffin and thus displacing it. The speaker had injected liquified into the nose of a cadaver, and had taken out a section immediately and submitted it to Dr. Jeffries for microcopic examination. The latter found that the paraffin ran around the fibres and blood-vessels, encircling the latter in the spaces of the fibres, He had then taken a syringe with a screw-piston action (Harmon-Smith syringe), filled it with paraffin in a melting condition at a high melting point, and forced from the end of the needle a solidified thread of the paraffin. This did not run all round the fibres, and the para-

ffin was taken out in a solid piece. This is satisfactory proof that liquified paraffin is best for injection.

Dr. F. M. Jeffries said that when Dr. Luckett had brought him the specimen referred to for examination, he had to resort to methods not usually employed in histological work. In order to obtain a section of the tissues by the paraffin method and to displace all the water, it is necessary to replace the latter by materials that will dissolve the paraffin, and then to gradually introduce the paraffin into this substance. This was impossible in the present instance, but after a series of experiments, it occurred to him to use the specimen just as though it had been through all this preparation. He heated some paraffin and embedded the specimen in it at a temperature just sufficient to melt the outer layer and not that contained in the tissues. Then sections were cut. Ordinarily the specimens obtained by the paraffin process are fastened to slides, the paraffin is removed and the tissues are stained and mounted on a slide. When the section adheres to the slide and the paraffin has been removed, the tissues remain just as injected in every relation, part to part. The paraffin was absorbed and everywhere that spaces were left, there paraffin had been, demonstrating just what Dr. Luckett had stated above.

Dr. Francis J. Quinlan presented an apparatus which he had devised for the subcutaneous injection of paraffin into the nose. He uses an ordinary antitoxin syringe, one that could be cleansed and sterilized easily, and a needle of very large calibre. When commencing his work he used the ordinary paraffin, but now adds to this 10 to 15 per cent vaseline. He has found that even if the temperature is high, the paraffin will cool and become coagulated in the needle of the syringe. To overcome this difficulty, he devised a jacket or hood of metal that keeps the paraffin at an even temperature. He attaches a rubber tube to a receptacle filled with water at a temperature of 120 degrees, F. and keeps up a constant flow through the jacket, keeping the contents of the barrel of the syringe at an even temperature and injecting it into the tissues up in the nose when needed. Of 94 injections of paraffin by this method he had had a few unfortunate accidents, but many excellent cosmetic results. He said that in introducing foreign substances, such as were heretofore used, to act as supports in the cavity as a result from loss of bone, tissue, or from congenital deformities, there is always a great danger of infection and suppuration. He knew of only one device, which, at the present day its author claimed resisted all infection, and that was a celluloid plate introduced to the profession by Dr. Dawbarn. The speaker said that Dr. Luckett had referred to the fact that his assistants place their fingers in position to prevent the paraffin from spreading where he does not want it to go. He had added to his armamentarium during the past year a silver ring, covered with an ordinary rubber tube. Instead of having his assistants place their hands over the field of operation to prevent the paraffin from running round up to the bridge, he simply slips this ring over the site of operation and then injects the paraffin into the tissues.

Dr. Luckett said that Dr. Quinlan had not dwelt on the reasons for his bad results. He thought that they might have been due to the fact that paraffin was at too high a temperature when injected, as this will cause the tissues to slough. A pressure-narcosis will not occur unless the paraffin is injected into the periosteum, or unless the syringe of Smith is used.

Dr. J. H. Burtenshaw presented a report of a case of

GENERAL PUERPERAL SEPTICEMIA.

The patient was a Frenchwoman, twenty-four years of age, who became pregnant in August, 1902. On December 9 she produced abortion by inserting an ordinary penholder into the cavity of the womb. The endometrium was badly wounded by the instrument considerable hemorrhage followed the introduction of such instrument. He was called to see her at midnight, December 19. Her temperature was 104.4 F., her pulse rate 120, and her respiration rapid and shallow. Peritonitis had developed. She had urinated but once during the previous twenty-four hours. Urinary analysis showed a specific gravity of 1031 and the presence of much albumin. Blood examination revealed innumerable streptococci and uterine scraping developed streptococci and staphylococci.

The uterus was gently curetted and a suppository containing one dram of iodoform, fifteen grains of starch, and glycerine, was inserted into the cavity. Enteroclysis was attempted, but was not persisted in as it caused the patient such marked pain. Eight ounces of blood was extracted from the median bacilic vein, and eleven ounces of normal saline solution introduced. Improvement was pronounced.

The following morning her temperature and pulse rate were as before and coma was developing. Subcutaneous infusion was practiced, but absorption was very slow. It then occurred to the speaker that thorough irrigation of the entire abdominal cavity with normal saline solution might accomplish three things: first, remove the collection of serum which undoubtedly already was affected by streptococci; second, through absorption of the most extensive lymphatic system of the body, the kidneys would be more quickly and radically influenced; and third, peritonitic adhesions would be prevented. Several gallons of a normal saline solution, prepared according to the formula of Locke containing sodium chloride 115s; calcium chloride, grain 3¾; and potassium chloride, grain iss to the quart, was made ready and kept at a temperature approximating 110 F. A four quart fountain syringe and tube were sterilized by boiling. A two inch median incision was then made in the abdomen midway between the umbilicus and pubes, and the tube of the syringe introduced as far as possible into the pelvis. For one hour the solution was allowed to flow into the cavity without intermission. The patient was frequently turned on her side and pressure made on her flanks to facilitate the exit of fluid. At the end of the hour her temperature had dropped to 102.6 F., and her pulse rate to 110. Forty ounces of urine had been drawn from the bladder, the last being of a specific gravity of 1013.

At ten o'clock at night the irrigation was repeated for half an hour. The following day, from ten o'clock until midnight, the irrigation was continued at three hour intervals. The abdominal incision was closed on December 19. Her temperature then was 100.4 F. and her pulse rate 100. From ten o'clock on the night of the 17 to noon of the 19, 210 ounces of urine was collected by catheter. Recovery was uneventful. On February 1 the speaker examined her at his office and found the uterus to be in good condition and freely movable, but enlarged and somewhat sensitive. Both ovarian regions were sensitive, and the left ovary was enlarged. He could discover no evidence of pus foci in the broad ligaments or elsewhere. There appeared to be an entire absence os peritoneal adhesions.

Dr. Luckett opened the discussion which followed the reading of Dr. Burtenshaw's paper. He said he thought the treatment adopted might be successful in a small proportion of cases. It had been tried and had failed. He knew of cases in which two incisions had been made in the abdomen through which the cavity had been irrigated, with very unsatisfactory results, the cases resulting fatally.

Dr. Burtenshaw said that he had not reported the case with any idea that the method would be adopted as a routine practice in puerperal infection. As far as he knew, it is the first case to be put on record in which the patient had recovered from such profound streptococcic infection by the employment of such a method of treatment. He was familiar with one or two detailed cases referred to by the previous speaker, but his own case possessed distinctive features. The kidneys had ceased to functionate and death would probably have resulted in a few hours had the urinary flow not been re-established as it was. The character of the solution and the length of time which it was allowed to flow into the abdominal cavity were factors which also differentiated the case from those referred to by Dr. Luckett. The entire absence of peritoneal adhesions and of the other ordinary sequels of septic peritonitis could only be attributed to the treatment adopted.

EXTRA UTERINE PREGNANCY.

Dr. L. J. Ladinski presented this specimen: Rupture had been attended by profound hemorrhage and shock. He thought all gynecologists were of the same opinion regarding the treatment of this condition, but differed as to the proper time to operate. In his opinion, no matter how profound the shock, the patient should be operated on immediately, even with unsterilized instruments, if necessary. The history of his case was as follows: Patient thirty years old; married nine years; three children and two miscarriages; last child seven years ago; last miscarriage one year ago; menstruated regularly until two months previous to admission to hospital, December 30, 1901. Five weeks after regular menstruation she was seized with colicky pains in pelvis, was examined by physician, who suspected extra uterine pregnancy. Immediately after examination patient fainted, remaining in this condition until brought to hospital. She was unconscious, extremely anemic, and on placing her on table and exposing abdomen, the latter was seen to swell. Her clothing was ripped up in front, an assistant introduced a saline into her vein, the offending tube was removed and the abdomen closed with three sutures, she made an absolute recovery in three weeks and was discharged from the hospital. After operation she remained in same condition as when put on the table for four or five hours, when her pulse and temperature became normal.

The speaker expressed the opinion that the more a patient is stimulated while suffering from hemorrhage, the greater the bleeding in the abdominal cavity, and the object in operating is to stop the bleeding as quickly as possible. After the tube has been removed, one is sure that whatever improvement takes place will be permanent, whereas, if stimulants are used, and the hemorrhage stops of itself, it is likely to recurr, and the patient may succumb to the shock.

Dr. C. G. Child said that he thought the hesitation about operating in these cases arose from a doubt as to positive diagnosis, and until the profession is able to diagnose these conditions earlier there will always be procrastination in operating. One simple way to make a diagnosis is by vaginal sec-

tion either anterior or posterior, and if free blood is found in the abdomen, the diagnosis is confirmed. When a physician who is always working on these cases makes a diagnosis, he is perfectly sure of his operative treatment, but the general practitioner had better substantiate the diagnosis through the vagina.

Dr. B. Torrens said that he thought immediate operative treatment justified in these cases. He had seen cases of ruptured tubal pregnancy treated for six weeks through the cul-de-sac, and operation had to be resorted to in the end.

BREVITY.

By C. E. Boynton, B. S., M. D., Los Banos, California.

I never expect to accomplish much fame,
But I've got a cold thought in my head all the same.
You doctors that write for this journal and that
Should fix up your thought to be pinned in some hat.
Now, Doctor Spickspan is in nine feet of gush
(The way up professor in Bellevue or Rush),
Is bowing and scraping to apologize
So much that you're tired when his name hits your eyes.
Now, Doctor Spickspan should come to the point
Or else he will bow his backbone out of joint.
Let him stand up erect and shoot off his gun,
Then sit down and load up to continue the fun.
Let him try to condense all his wit in a word,
Then the reader will listen and the writer be heard.

BRIEF MENTION.

Suprarenal extract is of value in Addison's disease, three grains daily.

Dr. Thomas G. Morton, the Philadelphia surgeon, died May 20, aged 67 years.

Either faradic or galvanic current helps constipation, positive pole on abdomen, negative on back.

Dr. R. Merger, San Antonio, Texas, suggests the hypodermic injection of adrenalin chloride as a possible cure for snake-bites.

Do you want sharp instruments? Then send to E. A. Harrington, Waukesha, Wis., for a dry hone. It keeps instruments, knives and razors sharp.

Triacol is a remedy which is giving good results in the treatment of respiratory diseases. The Alpers Chemical Co., New York, sends samples and literature on application.

In a case of hysteria produced by suppressed menstruation, I prescribed neurilla and it acted upon the patient with gratifying success. I shall continue is use where indicated.—F. S. Kanute, M. D., Amherst, Wis.

Aletris cordial, Rio, is indicated as a prophylactic remedy against post-partum hemorrhage, uterine weakness, great development of the fetus and of the adnexa, and in those cases in which there is a disposition to hemorrhages.

The St. Louis Alkaloidal Co., will be glad to tell you about their line of good preparations. Better write for particulars.

The Wheeler Chemical Works, of Chicago, make some preparations which every physician can use to advantage in daily practice. Send for price list and samples.

I am well satisfied with pepto-mangan (Gude), which is well worthy of the first place among the many iron preparations, especially since it does not affect the teeth in any manner.—Dr. Hofmeister, Custrin.

Dr. R. B. Leach's paper in this issue was read May 19, 1903, before the Minnesota State Homoeopathic Institute, which society contains many bright members, several of whom are contributors to the Recorder. One member, Dr. W. H. Leonard, of Minneapolis, recently celebrated his fiftieth anniversary of practice at a banquet attended by all schools.

In the functional wrongs of women Daniel's conc. tr. passiflora incarnata exerts a remarkable curative influence. It is indicated in every abnormal condition peculiar to women, dysmenorrhea, amenorrhea or leucorrhea, and possesses special tonic power on the whole uterine system. It should be prescribed for those who suffer from soreness in the lumbar region, backache or bearing-down pains.

Phenadul is a synthetic antiseptic which is giving some wonderful results. Dr. J. M. Crocker, 335 Howard St., Cambridge, Mass., reports a case of uterine cancer almost cured with phenadul. He says: "The patient is a women of nearly seventy years and today she feels as though she were but fifty; there is no pain, no discharges, no odor, the uterus is free from the malignant growth and she looks forward to the enjoyment of many years to come." Dr. Crocker is a well known physician and a skillful practitioner and doubtless would be willing to furnish further information about this case, if desired.

A splint, which is a good splint, and also permits the patient to walk, should fill one of those long-felt wants we hear about so often, but which are rarely filled. The device advertised as the ambulatory pneumatic splint is certainly ingenious, and from reports of physicians throughout the country having it in use, it would seem destined to universal sale. It can be used repeatedly, being thoroughly adjustable, all parts washable and easily removed. Its scope of usefulness is extensive, being adapted to leg, thigh, hip, patella, Pott's fractures, hip joint disease, tuberculosis of the knee and many other purposes where the ambulatory method is required, or desired.

From the pocket syringe and the sulphate of zinc solution to the Janet irrigation method was one big jump forward in the treatment of specific urethritis. From the latter to the capillary drainage system, as represented by the "Candle Drainage Bougie", is a still more striking advance. These bougies represent within themselves the three great points necessary in the treatment of gonorrhea, i. e.: Continuous medication, dilation of urethra and drainage. The general verdict of practitioners using these new bougies, which are being placed before the profession by the Abbott Alkaloidal Co., is that they form the ideal specific treatment which has been sought so long.

THE DOCTORS' LIBRARY

This Department contains each month reviews of the latest and best books. Items of book news will keep readers informed on progress in the world of medical literaure.

GYNECOLOGY.—Edited by E. C. Dudley, A. M., M. D., Professor of Gynecology, Northwestern University Medical School, and Wm. Healy, A. B., M. D., Instructor in Gynecology, Northwestern University Medical School. Volume IV, Second Series of the Practical Medicine Series of Year Books, under the General Editorial Charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology, Chicago Post-Graduate Medical School. Pages 242. Illustrated. Cloth, $1.25. The Year Book Publishers, 40 Dearborn St., Chicago.

In this volume the editors have endeavored to give a careful resume of the best practical literature of gynecology for the year, and have kept before them the purpose to make the work especially helpful to physicians who have occasion to treat the diseases of women. All phases of gynecology are touched upon as fully as possible in a work of this size. The only omission we have observed worthy of note is reference to Dr. Byron Robinson's original work, especially his contributions on splanchnoptosis. Cystoseopy and infections of the bladder receive considerable attention. These books are nicely made and are full value for the money, the set of ten year books being furnished for $7.50.

BOOK NOTES.

Several book reviews and several pages of Discussions were crowded out of this issue.

Dr. John Aulde, Kennett Square, Pa., will send free to our readers desiring them, several monographs on cellular therapy.

The Philadelphia Medical Journal has been merged with the New York Medical Journal with main office in New York and branch office in Philadelphia. The Philadelphia Medical Journal has been an excellent publication under the editorial management of Dr. James Hendrie Lloyd.

The Antikamnia Chemical Company never does things by halves and the latest antikamnia souvenir is fully up to the mark. The Antikamnia Company is now sending free to every physician a copy of Hill's Reference Chart just published. It consists of a set of reference charts on diseases of the nervous system and muscles, by Dr. E. C. Hill, well bound in cloth. The work will be very useful for reference.

"Success" for June sustains its well-won reputation for excellence in all of its popular features. The opening article is "Financing a Nation," by Frank Fayant, in which is told in interesting detail how the United States government raises and distributes billions of dollars of government revenues, and supervises the most extensive banking system in the world. Another readable article of natural interest is "The Young Men in the Administration," by Ridgley Torrence. Other strong articles, good fiction and numerous illustrations round out a good number.

By a notable change in New York publication circles three prominent monthlies have been united, and will hereafter be published under title of The Household-Ledger. The magazines thus brought together are The Ledger Monthly, founded by Robert Bonner in 1843, The Household first published in Brattleboro, Vt., in 1868, later in Boston and still more recently in New York, and Ev'ry Month, the

first issue of which appeared in 1895. In its departments the new magazine will be comprehensive, bright and replete with valuable suggestions. Columns of excellent fiction from pens of eminent writers, with several pages in each issue devoted to new music by prominent composers at once establish The Household-Ledger upon a high plane in the home field.

"A Lady of Influence" is the title of the novel in this month's issue of Lippincott's. Caroline Gebhart, the author, is remembered by an earlier story published in the same magazine called "A Real Daughter of the Revolution." "A Lady of Influence" is a st;ong novel. A few of the other good features of the number are: General Charles Kings's short story, "Pepita"; "Mahala's Plan," by "Josiah Allen's Wife"; Ella Middleton Tybout's parable in black, "The Ass that Vanquished Balaam." The only exception to fiction in the June number is a paper about birds and their songs by Henry Oldys. It is called "Woodland Music," and is enrichrd by music settings of bird phrases. The "Walnuts and Wine" department shows the exhiliration of the season in its many pages of sparkling humor.

The June McClures' is one of the most attractive numbers of this magazine ever issued. There is an unusually long table of contents, and not a page of dead matter. The number opens with a masterly appreciation by John La Farge of the three great French artists, Delacroix, Decamps, and Diaz, and illustrated with some exquisite reproductions in tint. Henry Harland's new serial, "My Friend Prospero," cannot fail to be a drawing card. Two first class articles are "At Ocean Graveyard," by P. T. McGrath, and "The Swimming Hole," by Eugene Wood. Miss Tarbell's Standard Oil chapter, the "The Great Consummation," one is tempted to pronounce the best yet. Ray Stannard Baker's article on Peter Cooper Hewitt's three great inventions provides a much needed and excellent popular account of what Lord Kelvin considered the most important work in electrical science being done in America today. These are a few of the features of the number.

Everybody's Magazine has always been good but the June number far surpasses all previous issues. Everybody's has been bought by Ridgway and Thayer, who are experienced and energetic magazine men. They have at once greatly improved the magazine and added thirty-two pages of reading matter. Of special interest is their statement that no contracts for objectionable advertising will be accepted and that as soon as old contracts expire all such advertisements will be dropped.

They say: "It is our intention to insert only high-grade advertising in our magazine. Not one fraudulent advertisement will be permitted to appear. We shall exercise a scrupulous censorship over all the advertising pages. Various lines of patent medicine and other curative and objectionable advertising will be declined, even when offered by well known and reliable firms. Whether it is desirable to publish patent medicine, curative, and certain kinds of financial advertising in a magazine is a question for each publisher to decide. Some accept it. The majority of the magazine publishers, however, have already decided to discontinue advertising of that nature. We believe the readers of Everybody's prefer not to see it in their magazine and we are making the magazine for them. June is not a heavy month for advertising, but we have declined $900 worth of that kind of business—and we could use the money."

MODERN THERAPEUTICS

Brief original communications and short abstracts giving the latest in therapeutics.

ARTICULAR RHEUMATISM.

By F. C. Gay, M. D., 114 Macon St., Brooklyn, N. Y.

Mrs. Margaret P., a widow 53 years of age, had an attack of acute articular rheumatism twenty-three years ago. She made a good recovery and appeared to be free from the trouble for five years, when she began to have pain, swelling and stiffness of the right wrist joint. It soon appeared in other joints and went on from bad to worse until every joint in her body was affected, and many of them were ankylosed, deformed and useless.

In December, 1902, her work as nurse, which she had kept up with great courage and will power, was obliged to be abandoned and she became practically helpless, unable to stand or walk or use her arms. On March 22d, 1903, she came under my care and I commenced treatment with chemical lymph No. 1, giving one hypodermic a day, ten minims at each dose. It was such a hopeless looking case that I promised nothing more than relief from suffering and some improvement of her condition. The relief was immediate and on the third day, much to my surprise, she hobbled up to the kitchen sink and washed dishes. On the tenth day the daughter, with whom she resides, moved to new quarters, and the patient walked to the new home. a distance of nine city blocks, by taking her daughter's arm and using a cane. Her improvement has been steady and rapid and for the past two weeks she has done more than half the housework of the family, which consists of eight persons. She goes everywhere about the house without a cane or other help, washes, irons and cooks, and is beginning to take exercise out of doors. She is looking forward to complete recovery, but very reasonably anticipates that it may take three or four months more of treatment to fully accomplish it.

COUNTRY SURGERY.

By F. E. Burgevin, M. D., Spiro, I. T.

Having been requested to furnish some notes of my surgical cases for the Surgical Clinic, I respond with pleasure to the call of duty, a labor of love, as it were. Here at Spiro in the Indian Territory, we do not possess the same facilities for operating as are enjoyed by the surgeons of Chicago, but excepting a few victims of railroad accidents who were promptly shipped to the railroad hospital at Kansas City, under care of the chief surgeon, I have not had to send away many surgical cases. As a rule we do our own surgery, and while we cannot show as brilliant results as Senn, Ochsner or Morris, we "get there just the same." I have not yet been so unfortunate as to lose one of my surgical cases. Of course that is more luck than skill.

I will illustrate by a few emergency cases just how we do our surgical work, that the younger and more timid brethren may take heart. Remember we have not the resources of a hospital to fall back upon, and are not overburdened with instruments or appliances.

Case 1.—Purulent hepatitis. Mrs. T., 29, one child, 4, for three weeks

had been under the care of another physician, who had diagnosed appendicitis and advised an operation, which was refnsed. I found a large tumor in the right hypochondriac region, eighteen inches in circumference, reaching from the upper edge of the liver to within one inch of McBurney's point; firm, symmetrical, tender on pressure, no discoloration or fluctuation, considerable pain not entirely relieved by opiates, temperature ranging from 102 to 103.5, pulse 100 to 112, face flushed and anxious, history of chills and fever, with gradual onset of present symptoms complex.

Diagnosis, abscess of the liver, by exclusion. She grew steadily worse in spite of my best efforts, and they consented to an operation. My associate and I put her under chloroform, and an explanatory incision was made the full length of the tumor, about five inches, dissecting down to the abscess cavity through the superimposed tissues, feeling our way, so to speak, as we both realized that we were treading on holy ground. However, the abscess, which originated in the superior lobe of the liver, had been pretty well walled off from the peritoneal cavity. We evacuated about a quart of greenish pus, then attaching a small nozzle to a two-quart fountain syringe we scoured out that same cavity, first with a gallon of plain hot water, then with a hot solution of hydrozone, which was continued until foaming ceased. The cavity was then packed with iodoform gauze, the wound brought together with catgut, leaving an inch open at the lower end for drainage; the edges cleaned with pure hydrozone, then dusted thickly with boric acid. Gauze and a bandage completed the dressing.

The alarming symptoms that presented were met with hypos of glonoin and strychnine. Calcium sulphid was given a free hand from the beginning. We removed the gauze on the third day, repeated the washing with hot solution of hydrozone and dressed as before; not a drop of pus was seen after that, and healing was rapid. She had no more pain or fever after the operation, and made a record-breaking recovery.

Case 2.—Boy, 15, jumped off a train while in motion and was thrown against a side track, cutting a deep gash in the forehead over the right eye. An hour later I found him comatose, pupils contracted, insensible to light, pulse thready and fluttering, considerable hemorrhage. Strychnine and glonoin brought about reaction, the wound was carefully cleansed according to my usual method with hydrozone, stitched together and dusted over with iodophyll. Reaction was met by a cold hood, aconitine and eliminants. The boy was soon well.

These cases are taken in the order as they occurred, and seem to show what we have been doing in this line recently, and how we country practicians handle emergency work.

In another report I will give an account of some of our surgical procedures for the relief of chronic diseased states, and what we have been able to accomplish in that direction.

DYSMENORRHEA.

Chief among the symptoms for which the patient seeks relief in this condition is the pain preceding or accompanying the menstrual flow. This pain is often of so agonizing a nature as to incapacitate her from all work or even to render her life unbearable. In these cases there may be present a displacement of the uterus, usually anteflexion, disease of the ovaries, uterus or tubes. In many instances, however, no pathological lesions can be found, the pain being due to a neuralgic tendency or to hypersensitiveness of the ovarian and uterine

nerves, which manifests itself by painful sensations during the menstrual period, owing to the congestion of the tissues at this time, and may be accompanied by cramps of the uterine muscles. In this class of patients Hayden's viburnum compound is especially applicable, producing a marked sedative effect, relieving the pain and uterine colic, and if its use is persisted in it will gradually remove the hyperesthetic state and effect a permanent cure.

If the dysmenorrhea be due to uterine or ovarian disease it will serve as a most valuable auxiliary to the local measures by helping to remove the existing congestion and overcoming any spasmodic element, thus greatly shortening the period of treatment.

NOT OPIATES BUT ANTIPHLOGISTINE.

Pain is the greatest instrument of torture with which the practitioner has to contend. It is the one symptom to which the laity attach the utmost importance. Absence of pain is to the patient always suggestive of improvement. Its presence especially in uterine affections causes apprehension of operation and for relief of those cases who will not submit to operation and in inoperable conditions, antiphlogistine strongly recommends itself, not only as a palliative measure but an excellent remedial agent.

This fact has been successfully demonstrated by the gynecologist. Its value is acute and chronic conditions of the ovary and uterus is prompt, permanent and certain.

Two different methods of application are permissible, each exercising a distinct function in therapeutics.

During menstruation the introduction of any medicinal agent into the vagina is contra-indidated and at this period the pain of catamenial irregularities can best be controlled by applying antiphlogistine over the abdomen warm and thick and covering with cotton and a compress. This practice persisted in for several periods prevented headache, lumbar pain and other vicarious concomitant symptoms. Many women who have been physically incapacitated for a day or two each month have been permanently relieved by systematic use of antiphlogistine at each menstrual illness. A potent influence is exerted over the sympathetic system which is so intimately associated with the physiological functions of the uterus that efferent stimulation neutralizes afferent irritation.

In the interval between menses, antiphlogistine is successfully applied to the cervix of the uterus in the followlng manner: Make a small gauze sack and fill it with antiphlogistine slightly larger in volume than the ordinary cotton tampon. Tie a string around the improvised sack and pass the antiphlogistine tampon with dressing forceps through the vaginal speculum to the os of the uterus, molding around the cervix. Through the induction of osmosis and dialysis of inter-cellular fluid, intra-mural tension is quickly reduced, local analgesia and undisturbed cervical drainage follow. For relief of a patulous uterus, the indurated cervix of endometritis and all irregularities of menstruation, including amenorrhoea and dysmenorrhoea, this treatment is far superior to the ordinary glycerine tampon, rendering marvelous results to the clinician and patient.

Multitoxine is curing tuberculosis, both general and local. It is worth investigating, for multitoxine has decided remedial virtues. The Aulde Chemical Co., Philadelphia, will send interesting literature on the subject to those desiring it.

In offering our Ametropometer to the busy Refractionist, we know that we are offering the best - - -

"Subjective Test"

on the market. The demand for this instrument surpasses any optical instrument ever invented. We furnish our

"Special" Trial Set,

at Jobbers' price when sold with Ametropometer.

Net price for outfit:

AMETROPOMETER	$30.00.
SPECIAL TRIAL SET	30.00.
RISING TABLE	8.50.
RISING CHAIR	3.75.
Total - -	$72.25.

JOHNSTON OPTICAL CO., Detroit, Michigan.

ECZEMA AND ITS CURES.

By M. E. Chartier.

Docteur en Medecine de la Faculte de Medicine de Paris, Membre Correspondant etranger de la Grande Encyclopedie, Section de Philologie.

Through experience extending over twenty-five years in the field of practical medicine, I have come to the conclusion that very few physicians can successfully handle an ordinary case of eczema. The main trouble, I believe, is that most preparations used to cure that troublesome disease are not readily absorbed, even if said preparations contain the proper ingredients.

Many physicians attribute their failure to the fact that in many instances the blood of the patient is deeply involved, and therefore that internal remedies are in order. This is only true to some extent, as it has been demonstrated that medicines administered by rubbing into the skin act directly upon the blood. This process has the advantage of obtaining the desired result without upsetting the stomach of the patient. This is particularly true of children and delicate women.

In Scrofonol I have found an effective preparation which acts promptly, giving relief from the very start. It is in the shape of ointment scientifically compounded, and the effect on the skin is obtained in a comparatively short space of time. The following cases treated by me are typical, and for this reason I may be allowed to call attention to them:

Henry G.—boy 14 months old, has been troubled during the last three months with infantile eczema; the face is particularly affected. The child cannot sleep at night on account of the intense itching. The mother is instructed to dry the parts and apply the cure with a soft cloth four or five times a day, so as to keep the skin perfectly moist The little patient becomes more quiet at once; sleep is restored, and inside of ten days the skin presents a healthy appearance. No medicine given internally.

Amelia G.—3 years old, sister of above patient. This case is not quite so bad; yet the face is covered with scaly eruptions. Same treatment. Cure affected inside of a week.

Edward M.—48 years old, molder by trade. This man is a hard drinker. He complains to have been sick for years with eczema. The legs and feet are covered with thick scales; inflammation very severe as is demonstrated by the appearance of the skin. The patient is ordered to cut his supply of liquor; besides the cure is applied four or five times a day. A permanent cure is secured in about six weeks. I shall say that this patient was in a very poor condition, probably on account of his drinking habits.

I could relate many similar cases in which I have obtained the best results. I will add, ho wever, that I consider Scrofonol a specific in all the variety of that disease, particularly in acute eczema (salt rheum) and chronic cases of long standing. I have also used this preparation with success in ring worm, pimples, barber's itch and other skin eruptions. That the cure has been permanent in each case can not be doubted, as I have not had a single relapse when the treatment has been faithfully followed. In each instance the healing has taken place quickly, leaving the skin smooth and in a healthy condition. The cases of the children mentioned above are typical in this respect, on account of their surroundings. These children belong to a poor family, living in a tenement house, and therefore not enjoying a sufficient amount of fresh air. For free sample and literature address,

PHENIQUE CHEMICAL CO.
St. Louis, Mo., U. S. A.

The Wisconsin Medical Recorder.

A Monthly Journal of Medicine and Surgery, Devoted to the Best Interests of the Whole Profession.

VOL. VI. JANESVILLE, WISCONSIN, JULY, 1903. NO. 7.

LEADING ORIGINAL ARTICLES.

TUBERCULAR ABSCESS OF THE MAMMARY GLAND IN WOMEN.

By Thomas H. Manley, M. D., Ph. D., New York.

Professor of Surgery, New York School of Clinical Medicine; Visiting Surgeon to Harlem Hospital; Visiting Surgeon to Metropolitan Hospital, Etc.

The study of new formations in the mammary gland in women must be always regarded as a subject of great importance to the practitioner; because, of all superficial, peripheral neoplasms, those of the female breast are, at once, the most common and the most deadly.

To stamp one of these swellings as malignant, as "a cancer", strikes terror into the heart of the patient, for she well knows as a matter of common knowledge, that do what we may in veritable malignant disease, the end sooner or later is death, and that, commonly, after a long and trying period of the most agonizing suffering.

To one advanced in years the pathetic deformity following the clearing away of an atrophic non-functionating breast is a matter of little consequence; but to a young, unmarried woman it is, on the contrary, most serious, for she is no longer a complete woman, stripped of Cupid's most inestimable adornment. Escape from a deep sense of humiliation is impossible; moreover this sacrifice in a measure unfits her for her duties as a mother, as no sort of artificial nutrition can ever amply substitute for her offspring, the mother's milk.

At the present time several of our foremost investigators are occupied in the study of the etiology of malignant disease with the hope that this, once well understood, the line of therapy will be simple and effectual.

In the way of enlarging our knowledge of the pathological histology of cancer there is probably little new to add.

Of late years while it must be confessed we have hit on no cure for the peripheral cancer, most agree that an early and wide excision promises the greatest prolongation of life, and hence, in mammary cancer, it is now quite commonly the custom to early clean away the whole gland besides the pectoral fascia and muscles, with all the lymph nodes in the axilla; a truly formidable procedure, one entailing a large deformity, impairing shoulder action, and not without immediate peril to the patient. That

this will cure cancer, no one can prove; that it extends life is doubtful. But this is amply warranted as a means to an end, when all can concur that it lengthens one's days, or at all events makes them more tolerable.

This operation must, however, be reserved for only malignant cases, and is under no circumstances warranted for any other. To sweep away a young woman's breast under a mistaken diagnosis, or for such local lesions as any of the benign growths, for an inflammatory intumescence, or for local pus accumulation of any character whatever, is somewhat more than a blunder.

Correct diagnosis therefore is something of paramount importance here, at the outset. The examination of a mammary tumor must be something more than a mere perfunctory act, in a considerable number at any stage of life, for the reason that a large proportion of them bear no relation to malignancy whatever.

Astley Cooper expressed himself clearly on this point, nearly a century ago, in the following terms: "The difference between the experienced and the scientific, and the ignorant and unobserving members of the profession, is manifested in the former readily discovering the distinctive characters of disease as soon as it is presented to his attention; while the other guesses at its nature, and if right is only right by accident; the uninformed surgeon is too apt to fall in with the opinion of the vulgar and confound all swellings of the breast with the general term 'cancer'."

MAMMARY TUBERCULOSIS.

Strumous or tubercular hyperplasia of the interacinous, or sub-glandular tissues of the breast is probably not a very uncommon affection, though in most cases it undergoes spontaneous dispersion early, the infection is not virulent or the defences of the system overcome it, so that suppurative changes do not develop, or if this be quiescent and limited it disappears by inspissation cretation and resorption.

Shattock, who has published one of the most valuable contributions on mammary tuberculosis in women, in speaking of the frequency of this malady, says: "Tubercular disease of the breast is usually regarded as a pathological condition of extreme rarity; but rarity here, as in many other cases, is apparent rather than real and arises from the condition being overlooked." He tells us that Nelaton first described it in 1837. But before the time of Laennec the term "tuberculosis" possessed no definite significance; hence we find the older writers speak of "cold abscess, strumous abscess, scrofulous suppuration of the breast, chronic encystive abscess, etc." "Until the beginning of the nineteenth century," says Ledran, "all tumors of the breast were considered malignant."

Duplay remarks that "the breast is the field of predilection of neoplasms", which, according to Billroth, 81 per 100 are malignant. Williams' estimate is 81 per 100. Labbe and Coyne allege that the benign most commonly appear between twenty and forty years, after this rare. But Thomas Bryant in his record of twenty cases of his own, cystic tumors, found the average forty-one years and four months, about three-fifths in non-child bearing women.

Mammary abscess of lactation, while immediately depending on the action of pathologic bacteria, seldom appears except in those mothers of a tuberculous predisposition, in that form of an insidious character so liable to be confounded with cancer, lactation appears to exercise no influence.

PATHOLOGICAL ANATOMY, AND DIAGNOSIS.

The pathology of tubercular abscess

of the mammae has not yet been made very clear; inflammatory changes primarily set in that large loose layer of myxomatous tissues, designated by Nelaton as the "bursa mammae" lying between posterior lamina of the gland and the sheath of the pectoral muscle, in which are lodged numerous large lymph vessels and small lymph nodes. From this deep structure turgescence extends towards the periphery, immediately forward over an area of similar dimensions to the primary site of invasion. Sometimes the area of peripheral tumefaction assumes an annular outline, leaving a well marked depression of the nipple.

The mode of infection is said to be hematogenous or by way of the afferent lymphatics. The latter mode of ingress is highly improbable, because if it were we should find the human breast the common site of secondary infection in pulmonary tuberculosis.

Except in the miliary type of mammary tuberculosis, the acinous secreting structures of the breast escape, but retention cysts of the deep acini or lactiferous ducts, may arise from trauma, or other causes, undergo suppurative changes, which later lead to widespread inflammatory infiltration and induration. In those of a strumous diathesis with vulnerent tissues, the pathological changes consequent on sanguinous effusion, from a severe local contusion, may determine local tubercular degeneration in the breast as elsewhere. Colebiewski observes under this head, "tuberculosis rarely develops as a result of trauma; but nevertheless the disease may remain latent until active symptoms are induced by an injury, when it will manifest itself as a primary local lesion." Infection is primarily in the deep cellular tissues, being subsequently transmitted through the lymphatics into the reticulated interlobular spaces, its ultimate course being in the direction of the areoli of the nipple where the integument is the thinnest. Hence the induration and the "lump" in strumous tumefaction, are always in a situation most commonly noted in scirrhus. The extent of suppuration in this type of chronic tuberculosis is usually limited, the pus is thick, viscid and of a greenish tinge, being composed of the common products of suppuration with more or less detritus of necrotic tissues.

The axillary ganglia may or may not be tumefied in mammary tuberculosis. Some authors claim that they are always free in non-maligant disease of the breast; but this is certainly an error; they were involved in a marked degree in my own cases; but every trace of intumescence subsiding promptly on the evacuation of pus.

In many of these cases; as in other lesions, wherein tubercles and giant cells are found, in the pus removed, Koch's bacillus may elude detection, and only inoculation experiment will definitely establish the character of the bacillary infection. Shield says of these cases, "the tubercular bacillus may be found in the discharges but this is by no means to be looked on as a certain diagnostic guide."

In a case reported by Powers operated for supposed cancerous disease of the breast; after amputation it was found that "true tuberular tissue" constituted the pathological change.

The accurate diagnosis of deep seated tubercular abscess of the breast, is a matter of great importance, for the reason, that while many of its symptoms are quite identical with malignant disease, its accurate detection at once relieves the patient of the dreadful apprehension of cancer, and moreover, leads to safe and radical measures of treatment, devoid of danger to life or mutilation by the needless sacrifice of a woman's most precious adornment.

The clinical history of these cases is so similar to scirrhus, that caution is

necessary not to be led on to the wrong path, by this part of the examination.

For example, we usually find a history of hurt to the breast, a contusion, at some not very remote period; at first soreness, then vague pains; later these become lancinating, interfering with repose; the patient soon finds a lump exquisitely sensitive to pressure; quite invariably she complains of pain in the arm on the affected side from pressure of the enlarged axillary ganglia. She has lost flesh, her digestion is deranged, the appetite fails, she has little strength or energy, the features wear a careworn expression of melancholy. The skin is anaemic, very fine and of a marble white pallor. She has a cachexia, but lacking the bronze hue of malignancy.

If we now examine critically we will discover that from time to time they have a cold sensation or chills in the evening; their temperature is often above the normal.

PHYSICAL EXAMINATION OF THE BREAST.

The character of the mammary swelling presents nothing distinctive, except that if we seize the fullness between the thumb and fingers we will find that there is an absence of that knotty hardness of scirrhus; as we press gently, but deeply, we may detect a heat, greater than in the other healthy breast. The normal female mammary gland imparts a sense of lower temperature to the hand than other area of the body's surface—besides, we may discover an indistinct sense of fluctuation on delicate palpation.

In some cases of scirrhus, there may be a localized mastitis without firm induration and a pseudo-fluctuation may deceive us. The tubercular test is too uncertain and moreover involves some risk, hence of doubtful utility, when we have at our command a simple, safe and always positive diagnostic resource, viz., the exploratory puncture with a hollow needle, or better yet a free deep incision.

TREATMENT.

Treatment may be very briefly summarized: local and constitutional. Treatment is definite and radical. We should be always prepared to combine with definite diagnosis, simultaneous treatment by a free vent for the discharge; this may be utilized for curettage, irrigation and capillary drainage.

Technique.—The surface having been well cleansed we cocainize the deep parts and benumb the cuticle with ethyl chloride. We next take a long bladed strong bistoury and press it point down deeply through the center of the indurated mass from two to four inches. The bistoury should be turned on its axis, and its point sent in, in different directions before withdrawal. This insures the free opening of any adventitious pockets and renders multiple punctures unnecessary.

With moderate pressure the deeply lodged pus is squeezed out. We may now curette the pyogenic wall of the abscess cavity or not. My own preference is to fill the cavity with saturated solution of carbolic acid, after a moment dislodge this and neutraize any excess remaining with strong alcohol. Then the cavity is gently tamponed with a ribbon of sterile gauze, which effectively suppresses hemorrhage, and provides ample capillary drainage.

Usually healing is complete within a fortnight scarcely a trace of scar remaining. From the beginning the patient must be well sustained by the most nourishing diet; change of air, bodily rest and cheerful surroundings are necessary. Among the tonic and alterative medicines called for are mercury, bark, iron, iodine and phosphorus. Most of these like all cases of

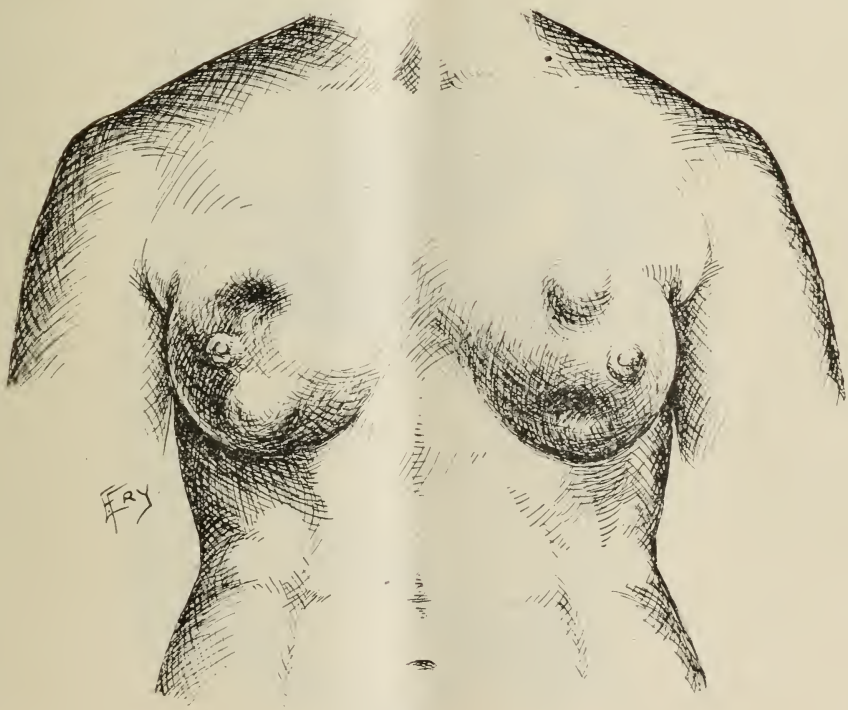


FIG. 1.

Showing various sites of bulging, dimpling and depressions in breasts, the seat of tubercular infection.

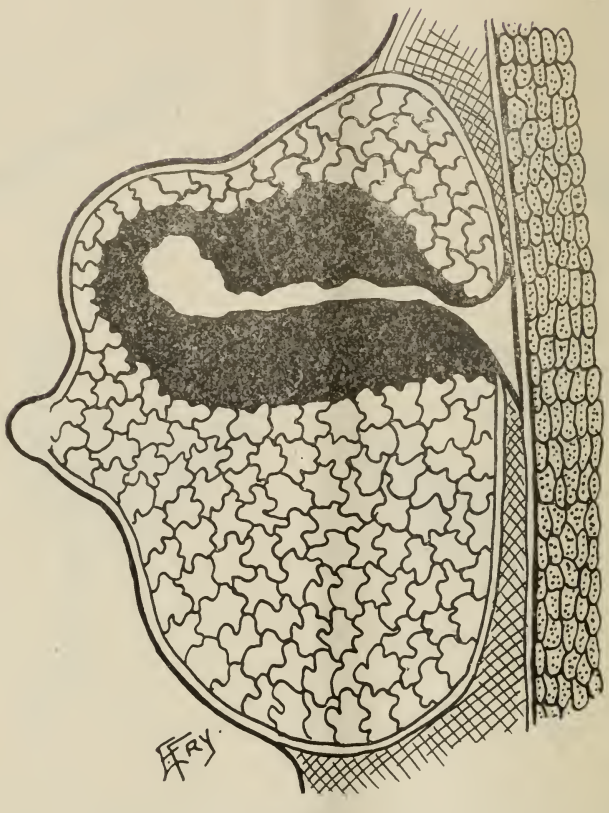


FIG. 2.

Dark centre inflammatory exudate: core pale, pyogenic sac.

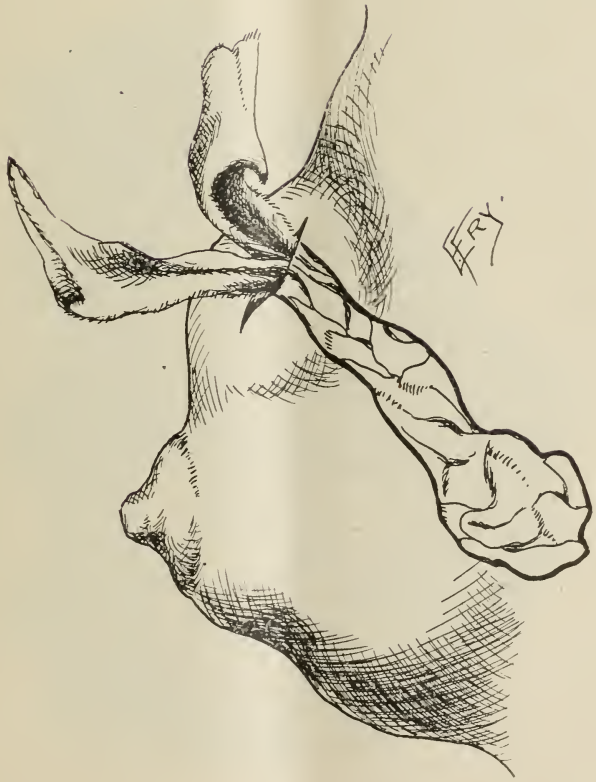


FIG. 3.

Site of incision, drainage and tamponage, after evacuation.

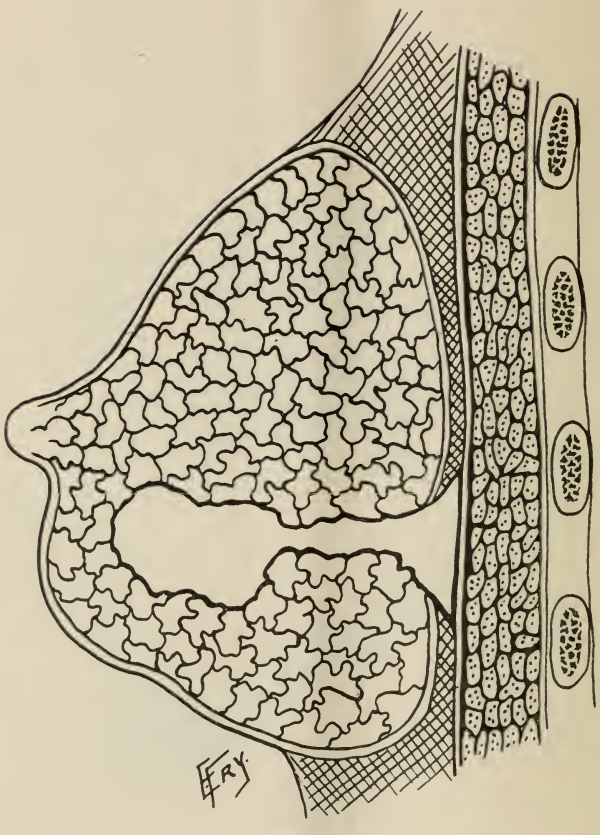


FIG. 4.

Sagittal section through to the pleura, showing primary seat of infection in the retro-capsular areolar tissues.

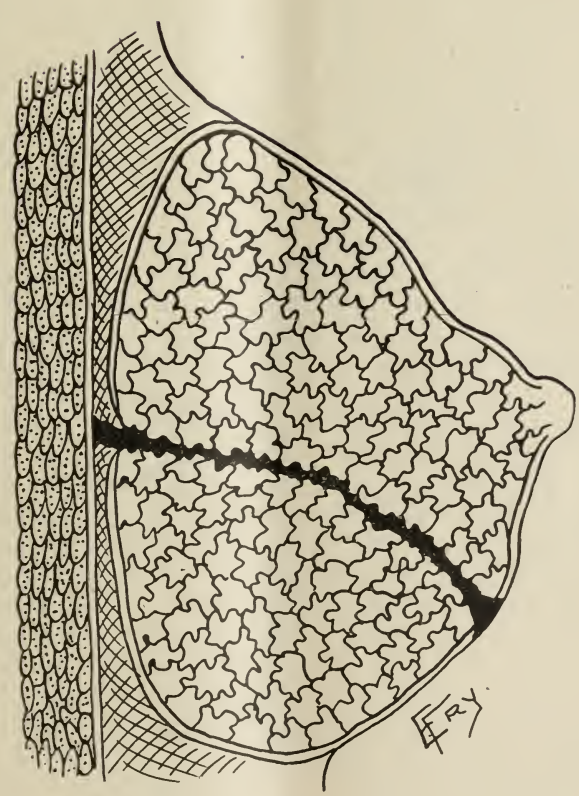


FIG. 5.

Showing seam of cicatricial tissue after repair.

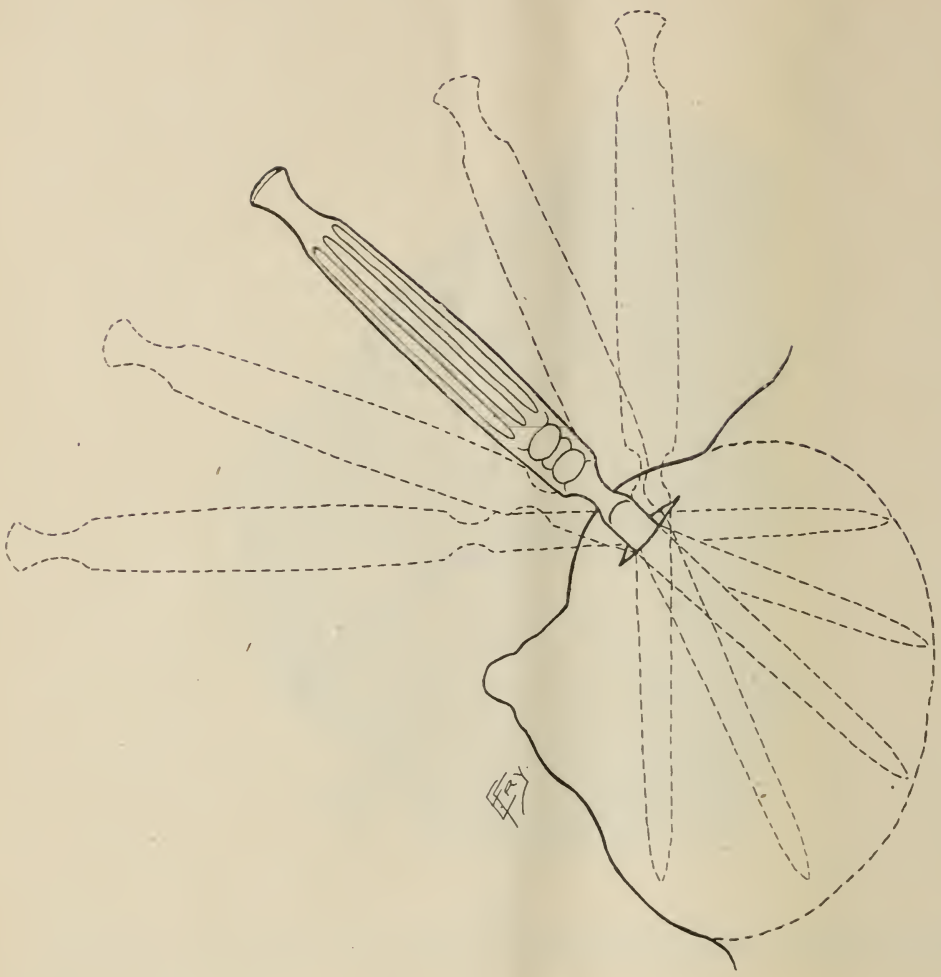


FIG. 6.

Showing radii of change of axis of scalpel after penetration. to reach hidden pus pockets.

their pathological class are greatly aided towards recovery by codliver oil with some form of alcoholics.

REPORT OF CASES.

Three cases of mammary tuberculosis have come under my care during the past ten years.

Case 1—Mrs. B., aged fifty-eight, married, mother of four children, always enjoyed fine health until about four months before she came under my notice, in January, 1893. Father died from an accident, mother died from tuberculosis at the age of fifty. She had entered the Alms House Hospital on Blackwell's Island, because of a chronic rheumatic affection, which had incapacitated her from earning a living. She was rather poorly nourished, but had large heavy breasts. Was anaemic and despondent. Four months before while mopping about in the dormitory in the dark, she struck her right breast violently against the top of an iron bed post. Since then, but not constantly, she suffered from a severe lancinating pain in injured breast. On examinotion a tumor mass about the volume of a hen's egg was felt, lying in the lower hemisphere of the left mammary gland and externally. The mass had quite all the ordinary characters of malignancy, i. e., it seemed continuous with the gland, was of a stony hardness and the axillary glands were distinctly tumefied. The surface, however, seemed unduly red, and morever it seemed altogether too sensitive for a scirrhus growth. She complained of frequent chills, besides her features at times wore a hectic flush.

A daily record of her temperature showed distinct diurnal fluctuation.

At that time, in this service, sanguineous surgery was followed by such bad results that I hesitated recommending the removal of the gland, as my first impression was that we had a malignant neoplasm to deal with. By daily observation I noted changes that led me to finally suspect that we had an inflammatory exudation, not a new growth before us. Hot poulticing gave the patient great relief.

Now being convinced that the patient had a deep suppuration, a species of cold abscess, I made a deep incision in to the center of the tumefaction. The scalpel went in fully three inches before pus was struck. This was freely evacuated, when the cavity was packed with iodoform gauze. There was an immediate subsidence of all symptoms following operation. In a month the discharge had quite ceased and the sinus had closed. Every vestige of inflammation had disappeared in the axilla. Six months later she was taken away by her friends and all trace of her was lost.

The above case was of unusual interest because of her advanced age and also from the fact because she was one of the pauper class that commonly do so poorly after operations, possessing but feeble recuperative vitality, their wounds heal tardily, and especially in strumous disease, deep incision may be followed by very troublesome sinuses.

All modern authors allege that mammary tuberculosis occurs most frequently in early adult life, from twenty to forty years; before the menopause. But it is always well to bear in mind the injunction of Charcot; viz. that senile tuberculosis, of the osseous, collagenous and lymph tissues is not very rare and that it may assume many of the clinical characters of malignancy. In fact it is often a matter of extreme difficulty to differentiate local surface tuberculous lesions from cancerous disease in old people.

Case 2.—Mrs. F., a young widow, thirty-one years old, came to me in June, 1896. Her husband had died of pulmonary tuberculosis two years before. Was now engaged to be mar-

ried again. She was of medium height, of a plump round figure. Had two living healthy children, Always enjoyed good health. Three months previously without any known cause shortly after weaning her last child, she became conscious of a sense of uneasiness in her left breast. Gave it little attention at first, but for the past month the breast became notably enlarged, highly sensitive and very painful, notably at night. Had been to one of our public clinics where she was informed that the breast should be immediately amputated, as she had "spreading cancer". On examination it was found that the patient had had but little sleep for the past two weeks, and since the breast had been condemned her depression, her intense despondency, was only relieved by free libations of strong spirits. Her features wore a melancholy aspect, she had bright blue eyes with a thin fine blanched skin. The malar prominence so peculiar to advanced malignant disease was absent. Her pulse was about 100 per minute in the sitting posture, the temperature 99¾. No evidence of any organic lesion could be detected. Her breasts were large and pendulous. Seizing the gland in the hand and contrasting its temperature with that of the healthy one, no notable difference in the temperature was evident; nor could any fluctuation be detected, but there was a surface flush over the prominence of the tumor, besides a peculiar, exaggerated hypersensitiveness, not common to scirrhus, before the stage of ulceration is evident. The axillary glands were tumefied and hard, upward movements of the arm giving her much pain. After a careful analysis of all her symptoms, and by a process of exclusion, it occurred to me that the case might be one of deep strumous abscess, the affection probably having been acquired from her late husband, manifesting itself in the retro-mammary lymph nodes, and enlarged indurated mammary gland secreting inflammatory infiltration into its intra-acinous spaces. In order to decide this a long, aspirating needle was passed deeply fully four inches into and through, from below, backward, on withdrawal the needle was found clogged by a thick greenish purulent material. A simple dressing was now applied and the pathological discharge preserved for histological and bacterial examination, the patient being requested to report again in three days. Microscopic examination revealed numerous degenerate giant cells with fragments of millet seed tubercular masses, pus corpuscles and tissue detritus. It was only after making four carbofuchsin stains that any of Koch's bacilli came into view; though few in nnmber they were well marked notwithstanding. Under cocaine analgesia a deep incision was painlessly made and about two ounces of very thick pus evacuated. The pus cavity was well curetted, then irrigated with sublimate solution and tamponed with iodoform packing.

In this, as the preceding case, all local and constitutional symptoms promptly subsided after the foul pent up pus was discharged. In a few days the intumescence in the axilla had disappeared, in three weeks no more induration existed and the wound had healed.

This case presented essentially all the ordinary symptoms of malignancy, but there was no history of trauma, nor was there anything to point to inherited malignancy. Three months after she left my care she was again married, and now after seven years she has had two more children. She nursed them both on this damaged breast, and both she and they are in excellent health. This case emphatically impresses the lesson that when an organ is the seat of a tubercular abscess, whether it be an ovary, a

testicle, kidney or the prostate or any other gland, we are not warranted in extirpating it simply for the purpose of eradicating a local limited pyogenic process. To have amputated this young woman's breast would have been to deform her and deprive her of a marriage which has proved a very fortunate one. She tells me that the breast operated upon secretes equally as much milk as the other, and has not given the least trouble since it healed. From the time the abscess was evacuated she was placed on general tonic treatment to overcome the pronounced anaemia and re-establish her strength.

Case 3.—Patient a young well built woman of a large frame and fine physical development, twenty-four years old, unmarried, family history good; parents, brother and sister all alive and well. Never had any serious illness, no history of the disease of the internal organs. Came to see me because of a tumor on the right breast. Three months before she was hit on the right breast by a person's elbow accidentally. Gave her very severe pain all the time, but after awhile only a soreness remained. Three weeks ago the pain returned, in exacerbations, breast became hard and sore; right arm somewhat stiff, and pangs of pain flitted down into the fingers; armpit sore and tumid. Had been under professional care; various local applications had been tried; finally was advised to have the breast removed; she was of a marble white pallor, large full blue eyes, not emaciated; complained of being very weak, was very despondent; said she would submit to any treatment, but she would not permit anyone to amputate her breast. Had large heavy pendulous breasts, there being no sign of former lactation. Pulse, sitting, 98, weak. Temperature, 99¼, had from time to time night sweats, frequent chills in the evening, loss of appetite and but little sleep. On examination a well marked tumor found in right breast, below the nipple, projecting outward and upward; painful and sensitive on deep pressure, a distinct sense of elevated temperature; indistinct fluctuation; mass exquisitely sensitive: surface of swelling smooth, shiny and a pale vermilion red. Fullness of a stony hardness except in center. Axillary glands enlarged. Diagnosis: probably deep tubercular abscess. Again introduced exploratory needle and struck pus. Following day entered Metropolitan Hospital. Treatment: deep wide incision, free evacuation of pus, injection of three drachms of pure carbolic acid, retained for fully a minute, and neutralized by strong alcohol. A small wick of sterile gauze was introduced and wool dressing applied. Recovery rapid, complete and uneventful. After spending but one week under treatment went to her home in Binghamton, N. Y. Returned to report in one month. Induration entirely vanished; scarcely a perceptible scar.

The above completes my experience with this interesting, but by no means rare class of cases. It is my conviction that fully 20 per cent. of all cases of mammary tumors are primarily tubercular, in a considerable proportion the infection not being of a virulent type, they undergo spontaneous dispersion; in others the foci of infection running into suppuration, the exudate undergoing but little change over a long period when well walled off by a thick pyogenic membrane. Even then from time to time inspissation, calcification or liquefaction may lead towards degeneration and absorption. A trauma disturbs this latency and calls forth fulminant symptoms. Consciously or unconsciously sustained an acute inflammation is set up within or external to the dense resistant capsule of the gland. Now is the time when we may work havoc with the gland by misdirected therapy,

either through a misconception of the course of localized tubercular processes, or by mistaking an essentially innocent process for malignant epithelial proliferation of the acinous elements of the gland.

The diagnosis of mammary neoplasm is by no means so simple a matter as some infer. The clinical history is certainly at times most delusive and even when the histological elements are under the lens the most experienced eye may be deceived. This is so apparent that some of our most noted surgeons rather trust the naked eye than the microscope. Banks, of Liverpool, insists that the macroscopical is the most certain test. Thomas Bryant, of London, in recording the histories of several cases of cystic lesion of the breast expresses surprise that so many should have been set down as cancers. The normal histological arrangement of the finer structures of the human breast is so confused and uncertain that we note that the best teachers of minute anatomy select sections of the mammae of the cat, the goat or the badger or other quadruped for purposes of illustration. If it be so difficult to secure a clear, truthful delineation of the normal structures of the healthy human gland, how does it become so simple to depict morbid changes in hyperplasia or neoplasm? Ideal surgery consists in preserving every possible structure in the human body. There can be no departure from this inexorable law, save only when life is imperiled or a person's future well being is menaced. With this view of the subject clearly in mind, we will do well not to rush in with drastic surgical resources, until we have a proper appreciation of the pathological character of the lesion before us.

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PHYSICS OF THE X-RAY.

By Dr. Gordon G. Burdick, Chicago, Illinois.

Chief Surgeon Peoples' Hospital; Professor Radio-Therapy and Photo-Chemistry, Illinois School Electro-Therapeutics; Associate Professor Surgery, Post Graduate Medical School: President Chicago Electro-Medical Society.

(Continued from page 181, June Recorder.)

We might spend a few minutes profitably studying the effect of the electric current within vacuum tubes.

When the exhaustion has been carried far enough to break up the atomic arrangement, and liberate the corpuscles in the tube, it is usually the hydrogen corpuscles that elude the grasp of the pump, and eventually they are the only free bodies in the tube.

Now by remembering that the corpuscles are capable of taking on a polarity of a like character when brought in contact with polarized surface, and under the well known law, that like poles repel each other, we can account for the rapid speed noted in vacuum tubes. Corpuscles normally have a negative charge, and revolve around a positive central ion, resembling and obeying on a small scale the high conception of the sidereal universe.

We succeed by our high degree of exhaustion in breaking up the stability of the miniature solar system, and may cause our planets to move in any direction, and as the hydrogen corpuscle is the lightest known form of matter, it goes withont saying that it is capable of a terrific speed when a free path is provided for it, and danger of collision avoided by exhaustion.

Corpuscles normally possess a negative charge, and it may be accepted as a fact that normally positive corpuscles do not exist in a tube exhausted to a Crookes vacuum, until a current of electricity is passed through the tube. By conducting a current of electricity to the terminal, we succeed in polarizing the electrode, starting all the negative hydrogen corpuscles towards the anode, where their polarity is reversed and they are shot off at an enormous speed towards the polarized cathode. But in the Jackson-Crookes tube, around the limits of the interior of the globe, in order to get as far as possible from the positive polarized target, the corpuscles converge towards the outer rim of the curved cathode electrode when their polarity is again changed, and they form the well known cathode stream, by traveling in the shortest path towards the positive polarized target, when their polarity is again changed, and they are reflected at right angles to the target, and are thrown violently against the inner wall of the tube there to suffer another reversal by encountering the anode stream, and it is at this place that chemical combinations are found. We have the ion derived from the cathode electrode which accompanies the cathode stream, until it is reflcted upon the glass, when it meets corpuscles of both polarity, and immediately a chemical union takes place, as corpuscles of both polarities with a central ion is necessary in order that chemical union may take place, and that it does take place we know from the gradual consumption of corpuscles in the tube, and the facility with which chemical union can be broken up by means of heat, so that we may recover our corpuscles again by submitting the tube to 350° of temperature, which is sufficient under the great degree of exhaustion to break up chemical association.

THE CATHODE STREAM.

This marvelous manifestation of energy deserves some especial consideration in order to understand the properties posessed by this wonderful source of energy.

This stream is made up of the finest and lightest particles in which matter exists. The hydrogen corpuscles which are extremely susceptible to slight changes of polarity; so much so that it is nearly impossible to exhaust them from an enclosed tube, by means of a mercury pump, as the friction of the particles of mercury is sufficient to polarize them, and cause them to retreat before the advancing mercury, even in the face of the extreme exhaustion, that may be present in the tube.

This pecularity of the hydrogen corpuscle makes it easy to understand the enormous speed attained in the cathode stream, each particle being repelled by the negative and attracted at the same time by the positive polarized target. A speed is attained conceivable only from a mathematical standpoint, and altogether too rapid to be conceived by the mind of man, in its present stage of development.

This speed can only be obtained under perfect working conditions and we have in practice several conditions that modify the speed of the cathode stream. The most important is the shape of the negative electrode the proper curving of the surface, in order to bring the particles of the cathode stream to a focus upon the target.

The apex of the proper cone is easily calculated, but where makers err in their calculations is not allowing for the action of the corpuscles upon each other, each corpuscle having a like polarity tends to repel each other, thus tending to widen the cone and bring the apex at least a fifth of the distance longer than a true cone would be.

The target for skiagraphic work should be set about 2 m.m. beyond the point where the apparant cone converges, and reaches a sharp point, so that when the corpuscles again change their polarity, and are reflected upon the glass, they will not pass through any portion of the cathode stream, and weaken the force which they travel.

Where a tube is constructed in this manner, enormous speed may be obtained by the corpuscles, making up the cathode stream, by simply increasing the electro-motive force of the apparatus, and viewing the X-radiation by means of a flourescent screen. It will be seen that the penetration increases in a direct ratio to the electro-motive force of the transformer, and when a given penetration is obtained the photo-chemical reduction power is increased, in direct ratio to the increased amperage consumed in the primary of the transformer.

The speed of the corpuscles are controlled by the degree of exhaustion, and the electro-motive force, and the speed of the corpuscles determining the degree of illumination of a screen; but does not indicate the photo-reductions of the light.

For instance, if we place a tube of a suitable vacuum upon a two plate static machine, and view the transmitted light from the tube by means of a flouroscope, and then change the same tube to another machine just like it, and running at the same speed, we find that the illumination is identical, because the electro-motive force is the same in both cases, the only difference that can be found is by means of the silver bromide plate. If we attempt to skiagraph a part, and it takes us 24 minutes with the two plate machine, we find we can reduce the same amount of silver just 12 times as fast with larger machine.

In the first place we have a few corpuscles traveling at a given rate of speed, due to the sustained electromotive force, in the second place by means of our increased amperage at the same voltage, we are able to cause just 12 times as many corpuscles to take a part in the bombardment of the target, which gives us just 12 times the quantity of X-radiations to reduce the silver of our plate. Of course it is understood that no allowance is computed for the waste of current that takes place in the average modern machine, due to defective construction. If this holds true of the static machine, what effect could we expect from our large X-ray transformers, with their enormous amperage, so in practice it is found that a good well made 12 inch coil is still 12 times stronger than a 24 plate static machine of the best make.

When measuring the X-radiation upon a silver bromide plate, or in other words a hip joint skiagraph that would require a 24 minutes exposure with a 24 plate static machine, we find with the coil that the work can be done in 2 minutes, it is for this reason that all the X-ray work in large laboratories is done by means of the coil.

For radio-therapeutic treatment we never can use the full power of the coil, but in the deeper structures we require a richer light than the best static machine can give up to date, as the medical effect of the ray bears a close relation to the photo-reduction power of the X-radiation as tested upon the bromide of silver plate. The flourescent effect upon a screen being

no indication of its medical value, but a useful means of arriving at the exact degree of penetration, that a tube is giving under working conditions.

(To be continued.)

THE TREATMENT OF BLIND INTERNAL FISTULA.

By Charles C. Miller, M. D., 100 State St., Chicago, Ill.

Blind internal fistula, least often seen of all varieties. is of considerable importance, as many times such lesions are operated upon without success. It has been my experience to meet with several of these lesions, which have not been cured after submitting to operation in the hands of prominent surgeons. If due care is taken, I am quite satisfied from my own experience, that the surgeon need not fear but that he will succeed in the operation for the cure of the condition.

Pus in the stool may be the only symptom. Sometimes, we can elicit the history of a preceding abscess, which was accompanied by pain, and succeeded by a purulent discharge. In some more or less pain is felt during defecation, in others, we may have pain caused by the occlusion of the orifice of the tract and the accumulation of the discharge. In not a few, especially, where the opening is low down upon the sphincter, the pus escapes from the rectum and soils the neighboring parts.

The finger may be able to discover the opening existing in the rectal mucosa, in other cases, only the indurated orifice can be felt as a hard nodule. Infiltration along the course of the tract may make it possible to trace it with the finger.

A careful search with a speculum and a good light should always be made if possible. The condition of the lesion may be such that the operation for its cure will need no anesthetic. This will be revealed by the last form of examination. When the opening of the fistula is found with the aid of the speculum, the tract is to be explored with a probe or director. This will reveal the length, depth and direction of the tract of the fistula. Where short, superficial, single and easily accessible, the operation with local anesthesia, or without any in fact, may be just as satisfactory and successful, as where general anesthesia is used.

If in the least doubt, after a thorough examination without an anesthetic as to the condition present, advise operation under anesthesia, for then when we have our patient unconscious, we can divulse the sphincter, and explore much more thoroughly. Success will often follow where the operater makes a very painstaking effort to learn all possible about the condition of the lesion, before making any attempt to cure it.

A short superficial tract, easily accessible through a speculum, may be injected full of a two or four per cent solution of cocain, and a strip of cotton saturated in the same solution may be placed along the course of the tract. After the lapse of several minutes, a director may be passed to the extremity of the tract, and it slit open without much pain. If the mucosa hangs flap like along the line of the incision, it may be trimmed with delicate scissors. Unhealthy tissue along the bottom of the tract is best curetted away. This may prove amply sufficient to secure a cure, though several other measures can be practised, if thought advisable. A ten per cent solution of silver nitrate may be mopped along the course of the tract, or pure carbolic acid can be used. These agents will stimulate healthy granulations to form and promote healing. They are particularly

indicated where induration is present. All portions of the wound formed by the operation must be searched to see that no sinus branches off from this main tract. If any are found they are to be slit open and treated as was the parent tract.

Where we are uncertain, as to the extent of the process, and a general anesthetic is administered, we have an opportunity to secure a better access to the lesion after divulsion of the sphincter. This is done with care, using only the fingers. The operation is performed in the same way, as where the local anesthesia was used. The search for any branch tracts must be thorough in every instance. The escape of such will mean failure. A second opportunity is seldom offered for the surgeon to operate in case of failure. Remember this in operating for this condition.

The after treatment, where the operation has been properly performed, will be of minor importance. Rectal douches may be used if desired. If the wound is accessible after stool the bowel may be irrigated and a strip of gauze impregnated with iodoform, balsam of peru, or some such agent, may be inserted into the bowel so as to lie in contact with the wound.

In complete fistula, we may find that more than one internal opening exists. If such open on opposite sides of the bowel, we will have what is known as a horse-shoe fistula to deal with. If both tracts are sufficiently high up, as to include any considerable number of the sphincteral fibers, it will not be advisable to lay them both open at a single operation. The deepest should be opened, the more superficial vigorously curetted. If after the lapse of a month or two, this tract which was merely curetted is found to still exist, then it may be opened upon a director, as in the ordinary operation for fistula.

This article closes the series upon fistula. Much more could be said, but if my readers will remember the principles, which I have outlined, and put them into practice upon their cases, they will be able to cope succesfully with these pathological conditions to their own, and their patient's satisfaction.

I have said nothing regarding the use of the ligature, nor of injections. I may as well be candid in this respect. I believe that the ligature will not prove satisfactory in a great many instances. The surgeon or physician, who is able to apply the ligature, can just as easily learn to do the comparatively simple operation for the cure of the condition. It will be more pleasant to the patient and much more likely to succeed. As a last word let me impress my readers with the importance of thoroughness in all these operations for fistula.

Regarding the injection treatment, I must admit that my experience while satisfactory to an extent, has been somewhat limited as to successful cases, and my opinions are not so settled, that I would care to contribute them in the form of an article at the present time. Any of my readers desiring information in this respect from me are more than welcome to it if they but make their wants known to me.

* * *

The routine of a physician's life is sometimes greatly brightened by the true gratitude of an appreciative patient. There are some patients who appreciate the efforts made in their behalf, but few people outside the profession realize the load of responsibility the doctor carries. The consciousness of lives saved and family circles made happy is some reward to the physician for his days and nights of toil, care and study.

AN OBSTETRIC CASE.

AN EXPERIENCE IN COUNTRY PRACTICE.

By Ralph St. J. Perry, M. D., Farmington, Minn.

Lecturer on Dermatalogy and Genito-Urinary Surgery, University of Minnesota.

The door bell gave vent to a loud clang and the doctor roused up, struck a light and looked at the clock.

"Four o'clock, darn it! I wish folks would not send for a doctor just when he wants to sleep the most. Why don't they send early in the night or else wait until the daylight."

So he put on his bath robe and slippers and went growling to the front door.

"Whatcher want?"

"Good evening, doctor, can you come out to Bill Brown's right away?"

"What's the matter?"

"His wife's sick."

"What's the matter with her?"

"She's got the 'diree' I think"

Then the doctor thought, "Diarrhoea be blowed. That man 'aint sending in here seven miles for a doctor at four o'clock in the morning for any diarrhoea It's dysentery, or a baby, or the Lord only knows what. Can't be a baby, either, for it's only a little over a year since the last one was born. Well, Bill Brown pays his bills and is a square man."

And the messenger stands waiting.

"You go back and tell them I'll get there just as quick as I can." Having started this bit of news out to the farm, the doctor rouses the barn man and orders the team hitched up; then goes back to his bedroom and dresses. It's the end of April, but it's chilly outdoors, so the fur coat and cap are donned, overshoes are put on, and then back to the office. Owing to the uncertainty as to the nature of the case, medicine, obstetric and general surgical grips were stored away in the buggy and away we go, ready for any old thing that may bob up. Three miles out we passed the messenger, sound asleep in his buggy and his horse walking slowly homeward. Poor man and poor horse; after a hard day's work on the seeder they have been dragged out at three o'clock to hurry into town for the doctor. So we wont kick even if they don't get back to the farm in time to tell the folks the doctor is coming. A little later we drove into the yard, welcomed by the barking of dogs who ran out to meet us. The man of the house came out to look after the team.

"Kind o' tough to get you out so early, but the women folks wanted you right away, so I sent the hired man down."

"What's the matter?"

"I guess its comin' a little too soon; we didn't expect it until next month."

So the 'diree' turned out to be a confinement case after all. Why don't country folks engage their doctor ahead, or why don't they send word to the doctor as to the nature of the sickness. Such a procedure would help out wonderfully at times, yet it is one seldom resorted to. Up in the sick chamber, Mrs. B. was found comfortable in bed.

"How long have you been sick?"

"I haven't been sick at all and I dont't know whether I'm going to be sick either. My time ain't up for a month yet."

"Had any severe pains?"

"Ain't had any pains at all."

"What made you think you were going to be sick then?"

"Why, my waters broke about half past two. You know I never have any pains until just the last minute."

And then you do remember that at her last confinement the "waters broke" about two hours before labor pains set in, and at the confinement before that the sac ruptured two days

before labor came on. It is a peculiarity of hers to have her waters come away without pains. What a good idea it would be if doctors carried a small pocket memorandum book in which could be recorded the various peculiarities and idiosyncracies of their patients. Each patient thinks the doctor should remember from year to year their little individualities and characteristics and the M. D. who can do so is considered an especially well qualified one; the many who can not or do not remember these, many apparently insignificant minutiae should resort to the pocket reminder.

During these inquiries, and others relating to the bowels, urine, sleep, meals, arrangement of the bed, etc., you have scrubbed your hands in a cyanide of mercury wash and are prepared to make an examination. This completed, there is found a normal head presentation and everything in good condition as far as can be determined. The uterine inertia you do not worry over because you know it is a peculiarity of this patient and because you can stir the uterus to action should it become necessary. Breakfast is called and you join the family in glosso-labio-maxillary calisthenics. Hardly has the last mouthful disappeared when the hired man calls in at the kitchen door.

"Ay tank dat red cow she come in now."

And we all adjourn to the barn yard to oversee the case. Perched upon the top rail of the fence you have a fine view of the field and a good chance to study bovine obstetric practice. After many sighs and grunts old bossy is relieved and you leave her to lick her offspring while you go up to the house to see how your case is progressing. You find everything as you left it and retire to another room to read the latest Farm Journal. Pretty soon in comes Mr. B.

"I guess this is going to be our busy day. That black mare of mine is trying to foal."

So, out to the barn yard again, and once more to your perch on the top rail. Sure enough there's something doing, but just at the most interesting part, when you are anxious to observe the old mare's method of attending to the cord, there comes a call from the house where Grandma stands on the porch.

"Hey-y-y doctor! You're wanted up here."

Grandma announces the arrival of good strong labor pains, so you hurry up stairs and in five minutes are scrubbed, cleaned and aproned, ready to oversee your patient. Things progress nicely, a few hard pains, some chloroform, more pains and in an hour or so one of the aunties present has the baby wrapped up in a warm blanket by the stove. A teaspoonful of ergot to help along the expulsion of the placenta; you sit with one hand lightly grasping the uterus through the abdominal walls, patiently waiting the final act.

"It's coming doctor, something is, I can feel it."

Digital and ocular examination shows this something to be a large clot presenting at the vaginal orifice. Its removal is followed by a gush of blood.

"Oh, my God! doctor, I'm going to bleed to death!"

"No you're not going to bleed to death. You lay still and keep quiet!"

But in spite of your words you know you are "up against the real thing now." Firmly tightening your grasp upon the uterus the other hand is rapidly thrust into that organ and discovers a partially adherent placenta. As quickly as possible you liberate the adherent portion and remove the offender. A glance at your patient shows her pupils dilated and lips purple—danger signals—but thank the Lord the uterus has responded to

your manipulations, has contracted and the hemorrhage has ceased.

But during those few moments of work and strain your mind has been active. You recall that this woman's sister died of a post partum hemorrhage some years ago; that the doctor who attended her lost the business of the entire family because he lost his head and did not know what to do, or did not do what he should have done to save his patient. You know that nothing would tickle this same doctor (who loves you not) more than to have you lose this case under similar circumstances. From now on your best energies are to be devoted to postponing your patient's funeral as long as possible. And when at last you straigthen out your back you see before you a woman suffering from shock and loss of blood, fully convinced that she is going to die, nervous, hysterical and altogether in a bad condition. However, you give her a good stiff dose of strychnine, have her drink a glass of hot milk with a little brandy in it, surround her with hot water bottles and flat irons, give her a rectal injection of saline solution and look as cheerful as possible under the circumstances. "Jolly" your patient, a few cheering words often do more good in these crises than all the medicine in the world. Here is where the power of suggestion comes in and you can just as well suggest to a patient that she get well as to suggest that she die. Many patients follow the suggestions of their doctors and friends, so always surround them with an atmosphere of good will, good health and rapid recovery and exclude all adverse suggestions, the morose and glum, the croakers and those friends who unconciously work in the interests of that man whose sign reads "Furniture and Undertaking."

After two hours' waiting and no evidences of further trouble having appeared you go home, leaving your patient fairly comfortable, pulse 80, temperature 100.5° F. That night a "special hired nurse" is put in charge of the case and your feelings feel better. Things progress satisfactorily considering the circumstances, discharge free and no bad odor, appetite good, bowels open and micturation easy. Then suddenly the cloud you have been expecting appears; pulse jumps to 120, temperature 103° F, abdomen tympanitic, bowels locked up and bladder corked up, patient restless, fussy and fidgety. You are not surprised or scared, you knew it might come at any time and you are prepared to meet it. To help matters grow worse the baby developed into a "blue baby" and died during the first night. It's taking off, however, was not so much of a shock as might have been as neither the mother nor the others expected it to live.

Now to overcome the peritonitis that has intervened and which threatens to precipitate that funeral. Unlock the bowels by rapid fire cathartics at one end and enemas at the other; uncork the bladder with a catheter, stimulate her weakened heart and proceed to knock the fever down. Here again the idiosyncracy came in. With this patient the simplest cathartics did good work; she told how nicely and promptly castor oil worked on her. Acting on this hint she was given good stiff doses of ol. ricini; and in half an hour or so it worked beautifully. A heart tonic tablet was given every four hours, aconite q-1-h, and salt solution enemas—about half a pint each—were given every two hours. You try strychnine arsenate as a general tonic and to help overcome the shock, but you find you are up against another idio—she can't stand it, it makes her nervious, fidgety, restless and aggravates all of her symptoms. This has been the history of previous attempts to administer strychnine, so

you cut it out with regrets and place your reliance upon good nourishing food. Thank the Lord she has a good appetite. Bread and butter, eggs, beef steak and broths,—as long as the patient can eat six meals a day there is no worry but what the effects of the shock and hemorrhage will be overcome. And sure enough, the pulse goes down, the fever vanishes, the tympanitic belly flattens out, the color comes back to her face, the pinched look disappears and she is on the road to recovery. The women of the family pack away their revamped mourning clothes, the men folks begin to hustle around and get to work putting their corn in, and once more the sun shines. Yesterday I was crossing a street down town when I heard a voice.

"Git ap! Joe. Hello, Doc!"

And there in the two seated wagon whirled Bill Brown, and Mrs. Bill Brown, and Grandma, and the little Brown kidlets, all smiling and happy, and looking a whole lot prettier than a funeral train of mourners wending their way through town to the little cemetery out east of us. These are the cases that make glad the life of the country doctors—one of whom I am which—and it's a wonder to me that some of the doctors in the cities don't get tired of being half starved and debt ridden and come out into the country, out into God's country and get fat and glad, and live well and save up enough money to wear a plug hat when they go visiting "up to the city." There is lots of room up here in the Northwest. Come up.

P. S. Since this narrative was done into type Bill Brown has paid me $56.00, and has assured me that he is "damn glad" his wife aint in a grave alongside of her sister, who, by the way, was his first wife.

Formaldehyde hypodermically is of value in many septic conditions.

DISCUSSIONS.

This Department contains each month case reports, letters, inquiries and replies from our readers. If you have a case you would like some help with, or a question to ask, write to us and we will publish it in this Department and you will get the opinions of our medical brethren. When you have an interesting case, write a report of it and send it in and it will help some one else We need each other's counsel so let us help each other from our experiences. Letters are desired from physicians on any subject pertaining to our profession.

MEDICAL EDUCATION.

The apparent demand for a higher standard of instruction in our medical colleges has been regarded by many with deep interest. Upon its face it is represented as a purpose to give better qualified practitioners, and so to bring medicine as a healing art to greater perfection. All that experience or invention has added, or can add to our stock of knowledge, is the duty of the medical student and of the physician alike, to become the possessor.

Medical instruction seems very defective. I do not know, however, that it is more so than the instruction in some other pursuits. There has been a tendency for years to dispense with thorough preliminary education in most of the professions and trades. Good workmen are often hard to get. Many houses are very slightly built, and do not require much of a wind to destroy them. Our books are often badly printed, and so poorly put together that they soon go to pieces. Our tailoring is frequently badly done, and the garment does not fit the owner as it should. Many seem to slight their work, and yet demand big wages.

There are several schools of medical practice in this country differing in their therapeutics. It is often intimated that there should be but one. The attempts at medical legislation now being made, and the attempts of a century ago of which these are the repetition, have for their ultimate object the annihilation of the rival

schools, and the consolidation of medicine into one uniform practice. Much of the noise about ignorance in the profession, and especially among the dissenting schools, has but the aim of evolving a public sentiment in favor of "stamping out" these schools by force of law. These schools exist, however, and according to indications will continue to exist. The charges that they are more careless or indifferent than their rival colleges in the matter of proficiency, is not truthfully made.

Not many years since a young man matriculated at a "metropolitan" college, paid fees and bonuses for private tuition from professors, spent his time in "doing the town", and at the end of three years received his degree of M. D., boasting that he did not know the simplest terms of the profession. Others have also graduated without a showing that was creditable. It is of but little account how high a standard may be advertised in the annual announcements, if the enforcement is neglected at the end of the course.

The standard that requires to be elevated, relates to the quality of instruction and its utility in regard to practice. It is as true in medicine as it is in other things, that a person is required very often to give up false ideas that he may have learned before he can go to work with any degree of success. The lessons of the classroom are too often a poor preparation for the business of life. Horace Greeley once said, that "of all horned cattle the most helpless was a college graduate". This has been true too often of the medical graduates as well as of others; and they have learned their therapeutics, if they did at all, at the bedside of their patients. All graduates from medical colleges have a right to demand of their instructors a fitness that they be thoroughly competent, so far as their instructors are concerned, to engage at once in active practice.

Botany, which few physicians know much about, and yet every one should know thoroughly, should be taught as it never has been in the medical colleges in America. Chemistry is now a science of magnificent proportions. Human physiology has almost come into adolescence, and materia medica is a field of infinite dimensions.

It is not necessary to discriminate further. Enough has been said to show what might be done, and that much time is necessary to learn these things well. The common method of crowding a mass of studies into a brief term of weeks is always injurious for practical benefit. We may enable students to pass examinations reasonably well and obtain the diplomas, but it is often true that a diploma rather than knowledge, is what the average student is after. The physician, like the poet, is born, not made. Books are good as far as they go, but they will not furnish brains and sense, such as are required for a successful physician. J. L. WOLFE, M. D.

Cedar Falls, Iowa.

GONORRHEA IN THE SINGLE MAN.

Probably the young single laboring man, gambler and saloon frequenter with the gonorrhea is the worst patient on earth with which to deal. Probably it is wisest to let them have nothing without the cash, but even this plan has its disadvantages.

J. B., aged 23 years; occupation, laborer; calls upon me with gonorrhea. I require $5 or $10 in advance. He pays it. With protargol, 1 per cent. injections ℥ss four times per day we stop the discharge in twelve days. J. B. has kept temperate that long, but on the thirteenth day he does some drinking, rides a wheel, contrary to directions, and on the fourteenth day the discharge is worse than ever. He

now receives careful daily treatment, but being without money his bill runs up to $25 or more and I treat him because he paid me the $5 or $10 in advance. Now he is up against it financially and declares that he must go to work. This he is not able to do and yet in spite of our advice he goes to work, and the next we hear he has gone to the city with orchitis, giving us the very d———. In thirty days he returns from city. His uncle has been putting up for him, and he has spent just $237. A little discharge still remains. One day he bucks wheat sacks for an hour and that evening goes to a dance. He begins to swell and have the pains of gonorrheal rheumatism and the discharge is worse. His uncle will put up no more for him and so he comes sneaking 'round to see us, making a hatful of promises but showing no money. We refuse to have more to do with his case and he goes to our neighbor and competitor across the way. He has it in for me. My competitor drops everything and works with this young profligate as though he were the banker's son. In two months he has made a "fine recovery". My competitor gets a boom and my back bill of $20 goes unpaid. Every few weeks this young man gets a "new" dose. In other words there is latent gonorrhea constantly in his case and a few drinks and a night of it starts it into activity.

I have not intended to give treatment in full. I merely outline a class of cases that physicians encounter frequently. Here is another:

E. M., who knows it all, calls to get a little treatment for a dose he got last week. He gets it, pays his money and goes away. I urge him to call again on Thursday, but mentally he says to himself: "If this don't fix me I will call on Dr. J. next." I meet him in three weeks and he tells me he is no better; he is grumpy; he does his kicking to others, not to me. The fact is that he took my treatment for two days; then his friend told him of a sure cure and he tried that. He has tried other sure cures and he is now thinking of going to the city. To every country man there is something magical about things in the city.

Now, how are country doctors to deal with this gonorrheal single man? Here are two plans: First. Put up, say, a $5 treatment. Require cash for it. Tell him that your large practice prevents you from taking his case and visiting frequently, as a man with gonorrhea should be treated. This we should make very plain, for when he has used his medicine, owing to his folly, he may be no better. He will call and you can offer him another $5 treatment, telling him it is all his fault if he is no better. Another way is to require a deposit of $25 and if that does not cure him refuse to treat him further without, say $20 more.

In any case, when a man asks you how long it will be before "you cure him" answer: "Anywhere from ten days to ten years. A man with gonorrhea should lie in bed and have a nurse to attend him." When he asserts that John and Jim and Joseph have been cured and had it bad, remark that all of these may have latent gonorrhea. Show him you are not at all anxious for his case and if he goes elsewhere because he does not like your terms, consider yourself lucky.

C. E. Boynton, B. S., M. D.
Los Banos, California.

Dr. Boynton's experience is only what all practitioners in all departments of our professional work meet. Often the best and most conscientious work is not appreciated. There is only one way to practice medicine and that is: Do the best work possible, charge a reasonable fee and get it, and then don't stay awake nights worrying if the patient does not appreciate the good work.—Editor.

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A Monthly Journal of Medicine and Surgery, devoted to the best interests of the whole profession.

J. P. THORNE, M. D., Editor and Publisher, Janesville, Wis.

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Letters, Case Reports and **Questions** are desired for our Discussion Department.

Society news and reports and items of interest are gladly received.

Vol. 6. JULY, 1903. No. 7.

EDITORIAL NOTES.

The death of Dr. Isaac Newton Love will be sincerely regretted by thousands of American physicians, who held him in high esteem. Dr. Love died of apoplexy June 18 on a steamship as the vessel was entering New York harbor. He was returning home from a month's trip in Europe with a patient and was apparently in the best of health. Dr. Love was born in Illinois in 1848 and went to St. Louis when thirteen years of age to live with a relative, Dr. John T. Hodgen, an eminent surgeon. He graduated in medicine and engaged in practice in St. Louis, giving special attention to pediatrics. A few years ago he removed to New York city. He held many honorary positions in medical societies and was a well known teacher. He is best known to the profession by his Medical Mirror, which from month to month carried his cheery message to doctors. Dr. Love was a charming writer and the Medical Mirror has presented his best work. The editorial departments which he wrote delighted many physicians. Dr. Love and his messages of cheer, suggestion and encouragement will long be missed.

Our intention is to carry only the advertisements of reliable firms in the Recorder. During the last year we have refused a good many dollars' worth of advertising which we considered questionable. The freedom of Recorder pages from investment and mining schemes, which we consider unreliable, is noticeable. We have had such offered us which we have considered fraudulent. If at any time any of our readers find any firm advertising in the Recorder to be unreliable we shall be glad to know the particulars. The advertising pages of a medical journal are important as they offer to physicians new remedies and appliances of value. It is necessary for the progressive physician to read the advertisements. We desire our advertising pages to be helpful to our readers and we wish no misrepresentation made in them.

The action of the last meeting of the American Medical Association in changing the code of ethics is worthy of commendation. The old code was obsolete and was not adapted to the needs of the profession of today. In reality the old code was as dead as some of the church creeds, which, although dead for years, have just been buried. The twentieth century profession must have a liberal code.

When you order labels please write your name and address very clearly, or better yet, send a printed card.

THE DOCTORS' WORLD.

Therapeutic Briefs, Medical News Items, and Clinical Notes on Medicine and Surgery.

Dogs.—Wisconsin has a superabundance of worthless dogs and as a result hydrophobia has appeared in various parts of the state at different times during the past few months. There should be more care exercised in handling these animals as it is well known that they are frequently carriers of contagion. London Health gives the following account of a case of glanders contracted from a dog:—A warning to those foolish persons who lavish kisses and caresses upon dogs (who after all don't seem to appreciate these endearments) regardless of the fact that such a habit, is productive of the most dire and unpleasant results. A young lady traveling on the railway, constantly fondled and kissed a little dog belonging to another passenger in the carriage. The little animal did not seem to resent these familiarities, and behaved very well, but it was remarked that it was constantly sneezing. Some time afterwards the young lady was affected with a redness at the end of the nose, which did not yield to any treatment. Then the nose began to be painful, inflamed, and began to secrete mucus. The physician who was consulted diagnosed the case influenza; but as she constantly became worse, and the ulceration increased, a consultation was held, when the microscope revealed a case of glanders, which had evidently been transferred from a horse to the dog.

Summer Sins.—The Rev. J. M. Driver, D. D., of Chicago, is in the habit of expressing his convictions in no uncertain manner. He recently delivered a sermon in the People's church on "Sins Peculiar to the Summer Season". He said in part:

What vanity and recklessness and irreverence and extravagance seem to be indigenous to the summer season! What multitudes fling their health away as though it were the cheapest and most easily restored of baubles! How reckless the most prudent become, and what risks, social and moral and otherwise, are not infrequently taken! Thousands who are the most cautious concerning their health throughout the winter at the first bombardment of the heat rush into every possible violation of the laws of physiology and hygiene. And thus summer, which by nature is the healthiest of seasons, becomes the sickliest and most fraught with fatalities. Take the matter of dress. What multitudes plunge from the warmest of flannels and woolens and sealskins into the daintiest and airiest of fabrics, and from commonsense shoes with arctic overshoes into gossamer footwear with lowers almost infinitesimally thin! And, utterly insufficiently attired, attend all manner of outdoor functions. What wonder that marriage on the man's part now means, not infrequently, the adoption of an invalid to nurse, and care for, and be patient with, watch over and weep over, and presently bury—utterly stranded and wrecked physically before the bridal altar is reached! And what wonder their offspring is often pale and puling and anemic and predestined to premature graves. Or take the matter of food. What gastronomic crimes are committed from

April to November in every kitchen and dining-room! With blood thick and heavy and sluggish, and the very atmosphere rife and reeking with carbon and nitrogen, the January bill of fare is continued. It is the same with heat-producing drinks. What schooners of beer are drained off with the vain delusion that beer is cooling and refreshing! Saloons crowded with drinkers and the streets with drunkards—playing with vipers in order to keep cool, and actually swallowing vipers for their health! And what crowds throng the soda fountain for nerve tonic! What amazing medicinal virtues are ascribed to the temperance root beer and gin fizz! And how the soda fountain man, who hears it all and knows it all, smiles as his soft drinks are greedly and solemnly consumed by equally soft people! What hypnotism and mesmerism and sometimes diabolism sizz from the ornamental faucet, and foam over the cut-glass goblet, and sparkle in the druggist's graduate.

* * *

Summer Diseases.—As the season is again here which brings with it the gastro-intestinal diseases which have wrought havoc with children, it is well to consider the best methods of combating these troubles. Elimination and intestinal antisepsis are the measures which will successfully meet these diseases. At the outset the intestinal tract should be thoroughly cleared of putrefactive material with a good laxative, then intestinal antiseptics, of which the sulphocarbolates stand at the head, should be used. Dr. W. F. Waugh first introduced the use of the sulphocarbolates to the profession and for twenty-five years he has been steadily hammering away at the idea of intestinal antisepsis and has been preaching the sulphocarbolates whose beneficial effect is not due entirely to their antiseptic action but to other effects such as cell stimulation, etc. The frightful mortality from these diseases of the past has constantly lessened as the profession has taken up their rational treatment. In an article on the use of the sulphocarbolates in the Alkaloidal Clinic. Dr. Waugh says among things:—The routine that has been established during the twenty-five years of unbroken success is this: Clear out the bowels with castor oil, calomel, mercury and chalk, aromatic rhubarb, lavage, or colonic flushing, as seems best in each case. For lavage I prefer a solution of zinc sulphocarbolate, a grain to the ounce; for colonic flushing this; for rectal flushing or when the type is dysenteric, silver nitrate, two grains to the pint. The solutions should be as hot as bearable. Then follow with the zinc salt, from 1-6 to 2 grains every hour. I have given the latter dose hundreds of times to children in the second summer, without irritation. Some take the medicine in solution, others in granule or tablet, but if there is decided irritability of the stomach it is best in powder with bismuth and pepsin. Where there is extreme acidity marked by excoriation of the rectal mucosa, etc., sodium sulphocarbolate, is preferable: or the triple salts—zinc, sodium and lime may be used with advantage. Both the latter sedate gastric irritability, but do not cure cholera infantum without the zinc. Great irritability of the stomach requires the great controller of the pneumogastric, atropine, hypodermically, enough to produce physiologic effects. The zinc should be begun whenever an unhealthy stool is passed, and continued till the discharges have lost all fetor.

The best diet is the raw white of egg in ice-water, coffee, rice-water, barley water, toast water, followed by meat soups and fruit jucies. Bovinine or even the juices from fresh, lean

beef squeezed out with the family lemon-squeezer, can be given in v—x gtt. doses hourly and in extremely debilitated conditions should be dropped on tongue gutt. ad gutt. and allowed to trickle down into the stomach. Many a child's vitality can only be supported in this way while curative measures are being carried out. Hot, cold or salt baths are always indicated. The hygienic condition of the house and vicinity must be made perfect.

* * *

A Medical Trust?—The American medical profession is proud of its great society, the American Medical Association, but there are criticisms in the air which indicate a growing dissatisfaction which will weaken the society. The association is really controlled and managed by a small coterie of men. Recently it appears as though they were managing the association for their own personal benefit and this is something which, if continued, will not be tolerated in this country. The lack of interest in some of the smaller medical societies is due to the fact that the few run them without allowing the majority a voice. The tendency of the American Medical Association is to make it subordinate to a great publishing business conducted for the benefit of a few. The American Medical Association should be primarily a great scientific body, and not be devoted to commercialism. Dr. J. C. Culbertson, editor of the Cincinnati Lancet-Clinic, says in an editorial commenting on the banquet of the American Medical Editors' Association at New Orleans:

"The writer is tempted to make mention of an incident, perhaps excusable and perhaps not. The incident thought of was the absence of the editor of the association journal or of a representative. A self-assumed representative, in responding to a toast, took occasion, foreign to his subject, to thank the independent medical journalists for the aid and assistance rendered from time to time by them to the association journal, and asked for a continuance of good will and fraternal fellowship. This expression was received with solemn silence, and why should it not be so? There was certainly no concert of action on the part of the independent journalists on the matter, but there was evidently a common feeling of dissatisfaction wiih the course of that publication. Evidently, a line has been drawn and the foundations of a wall erected which has for its intent and purpose a future antagonism of the association journal. There was not much outspoken feeling expressed, but mutterings and murmurings of discontent passed around from one to another."

Dr. E. C. Register in an editorial in the Charlotte Medical Journal, says:

"As a member of the American Association I don't believe that it would be amiss or improper in any sense, or an injustice to any one, to say that the Journal of the American Medical Association should not be the greatest advertising medium for proprietary medicines in this country. As long as this policy of the journal prevails evidences of prejudice against it will be in evidence. When they make the advertising of the proprietary medicines an insignificant feature of the journal, or better still, do away with it altogether, then, and not until then, will the name of the association journal create a different murmur from that described by Dr. Culbertson, or cause the applause that it, in many ways, deserves. I believe that a policy of this kind would be a help to the journal's great editor and his proficient assistants and enable them to do better and more acceptable work."

Rundschau.

By H. Speier, M. D., Rochester, Minn.

THE NEED OF DISINFECTION OF TYPHOID URINE.

In the course of the last two years physicians and sanitarians have enlarged their views regarding the ways of communication of typhoid fever. Formerly drinking water was held to be the only source of communication of the disease, but we have learned, largely from researches of Vaughn, Reed and Shakespeare, acting as a commission of the U. S. war department, that flies and dust take an important part in the dissemination of the specific germs, which may thus be deposited on food or introduced by means of inhaled air. As the typhoid bacillus is contained in the excreta of a diseased body, their thorough disinfection is necessary. The feces of patients have for some time been subjected to more or less perfunctory disinfection by physicians, but only of late has it been recognized that other excreta and especially the urine of a typhoid patient require attention. A paper by Mark Richardson in the Boston Medical and Surgical Journal sums up our present knowledge on the subject:

1. Typhoid bacilli are present in the urines of about 21 per cent of the individuals afflicted with typhoid fever.

2. The bacilli, when present are generally in pure culture and their number is frequently enormous, many millions in each cubic centimeter of urine.

3. The invasion of the urine by the bacilli takes place in the later stages of the disease. Unless measures are taken to remove the organisms, they persist frequently for months, and rarely for years, and thus constitute (a) a danger to the patient himself (cystitis and possibly orchitis and epididymitis), and (b) what is much more important, a grave source of danger to the public health.

4. The necessity for the rigid disinfection and supervision of the typhoid urines is apparent.

5. In urotropine we have a drug which will, in a vast majority of cases, remove the typhoid organisms from the urine, not only in the cases of simple bacilluria but also in those in which a cystitis has resulted. Very rarely an obstinate cystitis may require the use of vesical irrigations.

6. This subject in its relation to the public health is of the utmost importance. In this way we can prevent a considerable percentage of our typhoid convalescents from becoming unsuspected foci for the further distribution of the disease.

The writer recollects a case which about three months after convalescence from typhoid fever developed suppurative orchitis making castration necessary. With present knowledge I do not hesitate to look on the abscess as having been due to typhoid bacilli.

The possibillity of the presence of bacilli in sputa must never be forgotten, especially when bronchial or or pulmonary affections have complicated fever.

THERAPEUTICS OF THE X-RAY.

Much work is being done everywhere for the purpose of determining the range of applicability of the X-ray in the treatment of malignant disease. In a paper in the Medical Record of May 30. Dr. Wm. Jas. Morton as-

signs to the X-ray a wide usefulness in treatment of primary and recurrent carcinoma of the breast, supporting his views by a series of favorable cases. He thinks there is ground for the belief that in the X-ray we possess a relief or cure for cancer, especially in its early stages, which in its ultimate results compares favorably with operative treatment. A case of primary carcinoma of the breast may as hopefully and with as little ultimate danger to the patient, be submitted to the X-ray, as to any other procedure, with a certainty that no valuable time will be lost.

A less hopeful view is presented in a number of papers read before the recent meeting of the American Surgical Association. Dr. Wm. B. Coley has made special study of the effect of the X-ray on sarcomas. His observations led him to the conclusion that the rays in themselves were of little value, but as an adjuvant to the mixed toxins they possessed a distinct therapeutic use. In several cases the rays had caused the entire disappearance of the sarcomatous growth, but in every case there had been a distinct and fatal recurrence. There was danger of the establishment of a toxemia from absorption of the broken-down neoplasm and possibly of metastases.

Dr. A. D. Bevan, of Chicago, also paid much attention to the limitations of X-ray therapy. Only superficial carcinomatous cells, such as epithelioma are destroyed by the X-ray, and the depth, to which they are undoubtedly effective, is not more than one cm. At greater depth they were not reliable. Cancers of the breast not only are not helped by the X-rays, but there is good reason to suspect that in some cases the rapidity of general carcinomatosis is increased by their use. But he admits the possibility of future development of the effectiveness of the X-rays to greater depths. Either physicists may improve the power of the rays without augmenting their malign characteristics, or perhaps, by the introduction of some chemicals into the parts prior to their exposure to the ray, the vitality of the cells might be so reduced as to kill them with the rays as at present used. A similar tone of scepticism prevailed in other papers and in the discussion whicn was opened by Williams of Boston. The consensus of opinion was that only in superficial maglinant growths has the X-ray undoubted therapeutic value. It would be well for the profession in general to bear this in mind and not allow patients to delude themselves with expectations and hopes which have only a very slender foundation, and may lead to sad disappointment.

SEASONABLE TALK.

With the advent of midsummer the the coming of summer diseases, particularly that of infantile diarrhoeas is to be expected. It behooves the physician to look over his armamentarium in time so as to be able to stay the slaughter of the innocents. The subject is thoroughly understood, one of the best known in medicine, and nothing new can be said about it, only a few words as a reminder. The best curative results are obtained by regulation of diet, withdrawal of food at the beginning, attention to surroundings, dress, air for breathing, light, baths, and medicinally by intestinal antiseptics. Sedatives must be used with caution, opiates are badly tolerated by children. The chief aim must be towards prevention. Let the country physician relinquish the idea that it is only in the large cities that the milk supply must be watched. The writer knows from his own observations that much of the milk furnished in country towns is collected and handled with sovereign disregard of hygienic measures and is an undoubted source of danger.

THE DOCTORS' LIBRARY

This Department contains each month reviews of the latest and best books. Items of book news will keep readers informed on progress in the world of medical literaure.

ARTERIA UTERINA OVARICA.—The Utero-ovarian Artery or the Genital Vascular Circle, Anatomy and Physiology, with their Application in Diagnosis and Surgical Intervention. By Byron Robinson, B. S., M. D., Author of "Practical Intestinal Surgery", Etc. Pages 182. Illustrated. Cloth, $1.00. E. H. Colgrove, 65 Randolph St., Chicago.

This is Byron Robinson's latest book and one of his best, representing an immense amount of work—original investigation and study. The following on the title page of the book shows the object of Dr. Robinson's arduous labors: "The object of research is the benefit it may confer and not merely to know the truth." Previous to the publication of Dr. Robinson's work on this subject very little has ever been written on the subject. The data on which this book is based were secured through fifteen years of experimental research and many years as a gynecologist. The book gives the anatomy and physiology of the genital vascular circle and shows the value of their knowledge in diagnosis and treatment. The volume contains 117 illustrations, some of which are printed in colors. This work is a valuable addition to the literature of our profession.

OBSTETRICS.–Edited by Reuben Peterson, A. B., M. D., Professor of Obstetrics and Gynecology University of Michigan, Volume V, Practical Medicine Series of Year Books, Under the General Editorial Charge of G. P. Head, M. D. Pages 204. Illustrated, Cloth, $1.25. The Series of Ten Year Books, $7.50. The Year Book Publishers, 40 Dearborn St., Chicago.

A review of the year's progress in obstetrics is given in five sections. Part I deals with pregnancy. The physiology and pathology of the placenta and its membranes is well covered. The pathology of pregnancy takes up considerable space. Eclampsia is well handled and the different theories given. Extra uterine pregnancy is thoroughly covered as are many of the complications of pregnancy. Part II deals with labor and the difficulties and complications resulting therefrom. Part III deals with the puerperium, especial attention being given to the puerperal infections and to their cause. Part IV is devoted to the use of forceps and the other surgical interferences necessary in some cases.

MEMBRANOUS CATARRH OF THE INTESTINES.—Part III, Clinical Treatises on the Pathology and Therapy of Disorders of Metabolism and Nutrition. By Prof. Dr. Carl von Noorden, Physician in Chief to the City Hospital, Frankfurt A. M. American Edition Edited by Boardman Reed, M. D. Pages 64. Cloth, 50 cents. E. B. Treat & Co., 241-243 West 23d St., New York.

Membranous catarrh of the the intestines is one of the diseases frequently met in daily practice and one which is often difficult to treat satisfactorily. As in his other works, Prof. von Noorden presents his views clearly and positively. He gives the pathology and treatment of the disease in a condensed and practical manner which the busy practitioner will appreciate. The book abounds with helpful suggestions and we commend it to the general practitioner.

TRANSACTIONS OF THE AMERICAN ROENTGEN RAY SOCIETY.—Third Annual Meeting. Pages 178. Illustrated. Cloth, $1.25. Paper, 75 cents. Dr. James B. Bullitt, Louisville, Ky.

This volume contains the papers read at the last meeting of the society in Chicago, December 10 and 11, 1902. The papers are by men who have become prominent in X-ray work—Drs. G. G. Burdick, J. Rudis-Jicinsky, J. B. Murphy, J. T. Pitkin, E. H. Grubbe, and others. Various phases of X-ray investigation and application are presented which make the work of value. The book can be considered a treatise on the X-ray furnished at a very reasonable price. It is illustrated with half-tone plates.

The book may be obtained of the secretary of the society, Dr. J. B. Bullitt.

SOME ELEMENTS TO BE CONSIDERED IN URINALYSIS.—By J. W. Crismond, M. D., Anderson, Ind. Paper, 25 cents. Published by the Author.

This is a series of six essays presenting an up-to-date summary of modern methods of urinalysis. It is a useful booklet.

BOOK NOTES.

Battle & Co., St. Louis, have just published Chart No. 12 of their series illustrating fractures of the large bones. This one shows Colle's fracture and concludes the series of colored plates. In September the same firm will publish a diagnostic chart of tumors by Dr. E. C. Hill, of Denver. Battle & Co. send these publications free to physicians.

The July McClure's Magazine is a fine issue, being greatly improved typographically. The two leading articles are Miss Tarbell's chapter in her Standard Oil History and Lincoln Steffens' "Philadelphia; Corrupt and Contented", which gives the story of municipal grafting in Philadelphia. "Mountaineering in Switzerland Without Guides" is a well illustrated article by A. P. Abraham. The number has plenty of seasonable fiction, good poetry and fine pictures.

The complete novel in the July Lippincott's Magazine is "The Pretenders", a tale of modern society by Ina Brevort Roberts. All the short stories in the July number are suited to the "good old summer-time" when one is not ashamed to confess he wants something not solid but entertaining. The single exception to fiction is a paper by Maud Howe—a daughter of the venerable Mrs. Julia Ward Howe—entitled "A Roman Holiday". It gives intimate details about housekeeping in the Eternal City and is very interesting. For a jolly outing or to drive away the blues at home we recommend "Walnuts and Wine" department.

The Ridgway-Thayer Co. is making an elegant magazine of Everybody's. The July number contains 140 pages of reading matter and there is not a dull page in it. It is a marvel how such a magazine can be sold for ten cents. "Flying Down a Fifty-Mile Flume" is a profusely illustrated article by Bailey Millard. "Intimate Portraits" introduce you to people whom you are glad to know, "The Kindergarten of the Streets" is a good article, well illustrated, by Edith Davids; "Caesar of Tobacco" is a biographical sketch of Mr. Duke, of the tobacco trust. We have room to mention only a few other articles: "The Unemployed Rich," "The Love Affairs of John Wesley," "July Out-of-Doors," "Significant Biographies," "The Lawyer." The number contains plenty of fiction and lots of illustrations.

MODERN THERAPEUTICS

Brief original communications and short abstracts giving the latest in therapeutics.

CHOREA.

SUCCESSFUL TREATMENT.

By F. C. Gay, M. D., 114 Macon St., Brooklyn, N. Y.

Ethel S., ten years of age, suffered intensely with grief at the sudden death of her father. Choreic movements appeared in a few days and continued for six months before she came under my care. The trouble was growing rapidly worse at that time. Every muscle in her body seemed to uncontrollable. It took several hours every night to get her quieted down to sleep, and then she would sleep only three or four hours. I saw her on several occasions when going through a doorway bump against the side and bruise her head or shoulder. She was anemic; speech was incoherent; appetite very poor, and indigestion severe from swallowing food without mastication.

I gave her hypodermic injections of Chemical Lymph No. 2 five mimims once a day. For three weeks there was no permanent improvement only occasional days when symptons were less severe. During that time I had been slowly increasing the dose until she was taking the usual adult dose of ten minims. On the twenty-second or twenty-third day a decided improvement of all symptoms was noted, and every succeeding day showed more improvement, until now after two months treatment, she is a very robust looking, bright appearing girl, perfectly free from any choreic movements; sleeps about ten hours every night; eats three meals every day, and digests all food perfectly. This was a serious case of chorea and recovery was perfect under treatment.

IMPAIRED DIGESTION OF INFANTS—PARTICULARLY BOTTLE-FED BABIES.

By F. H. Munroe, M. D., Newark, New Jersey.

The first few months of a baby's existence are fraught with much anxiety to both mother and physician.

The stomach, just beginning the functions for which it was created, is somewhat loth to accept the changed conditions; it frequently rebels at having to perform the act of digestion as it should, and rejects the food committed to its care.

Sometimes the cause of this rejection may be overfeeding, but much more frequently it is due to hyperacidity caused by fermentative changes in the food itself.

Particularly is this true of bottle-fed babies, and in the trials of food necessary to discover the one that best agrees with the baby, much time is lost and much worry is caused.

The very nature of artificially prepared foods predisposes to their rapid fermentation, and the progress of digestion is begun before the food leaves the laboratory.

Added to this condition is that of slight uncleanliness, which frequently exists in spite of the persistent use of boiling water in the bottle, tube and nipple. Even a strong solution of borax orbi-carbonate of sodium is not sufficient to thoroughly remove the particles of food, and prevent the ex-

cessive fermentation and its sequelae, namely, colic, vomiting and diarrhoea.

The only rational method of treating this dreaded condition is to assist nature in her efforts to establish a normal process of digestion, and overcome the too active fermentation taking place in the stomach and intestines. Investigation has shown that these abnormal conditions may be readily overcome, and normal conditions restored by the internal administration of glyco-thymoline in small doses, and its further use in cleansing the tube, bottle and nipple.

Ten drops of glyco-thymoline added to each two ounces of feeding will usually be sufficient to correct hyperacidity and prevent diarrhoea, but larger dosage are necessary in cases where diarrhoea has already set in.

That glyco-thymoline does all that is claimed for it in this class of cases was conclusively proven to me last summer by the results I obtained in three cases of fermentative indigestion, which for some time gave me considerable trouble.

Case 1.—An infant, fourteen months old, fed on a modified cow's milk, suffered from vomiting after feeding, eructations of gas and colic, which persisted until relieved by the passing of wind; vomited matter very sour smelling. The diarrhoeal movements were attended by pain and contained mucus of a greenish color—all the symptoms pointed towards an intestinal fermentative indigestion.

I had used several remedies in this case, with indifferent results, when my mind recalled the peculiar action of glyco-thymoline on engorged and inflamed mucous membranes, and I immediately prescribed it, ordering ten drops to be put into each two ounces of food, the bottle and nipple to be washed with a twenty-five per cent. solution, and the nipples, when not in use, to be kept soaked in glyco-thymoline of full strength.

The effect was immediate. Within twelve hours there was a decided improvement, and within twenty-four hours all the serious symptoms had entirely disappeared and a normal condition was restored.

Case 2.—Child, almost two years old, fed on milk, cereals and carefully selected diet.

The symptoms, much the same as in the above described case, but the diarrhoea was more severe and tenesmus and pain more marked, with bloody stools, apparently a severe dysentery. Microscopical examination of the stools showed the presence of a fungus of the yeast plant variety.

The colon was flushed twice daily with glyco-thymoline solution, two tablespoonfuls to a pint of water, by high rectal tube, and a teaspoonful of glyco-thymoline by mouth every four to six hours. This was followed by marked improvement in every way.

I have given glyco-thymoline internally and by rectum in other cases, but the above are good samples of what Kress & Owen's preparation will do. It has become one of my "sheet anchors" in the treatment of intestinal disorders, both in babies and older people.

TREATMENT OF ANEMIC CONDITIONS.

By Fritz Euler-Rolle, M. D., Vienna.

In the following I desire to describe in some detail the action of an iron preparation which, owing to its great advantages, deserves a permanent place in our materia medica. The preparation referred to is pepto-mangan (Gude), which unites in a fortunate manner those qualities which we we have a right to demand of a ferruginous remedy. In the first place it contains besides iron a second constituent of importance in the forma-

tion of blood, namely, manganese; and, secondly, both of these are present in a neutral solution, which is the more to be valued since because of this fact it disturbs neither the gastric nor the intestinal functions. For this reason we are enabled to submit every case of chlorosis at once to ferruginous treatment irrespective of the condition of the gastro-intestinal tract. Other authors have called attention to this advantage. Heitzmann emphasizes particularly how well the preparation is tolerated, and that, unlike other chalybeates, it does not have an injurious influence upon the digestive organs, but even increases the appetite.

Ripperger considers the preparation as a very useful and easily assimilated remedy, free from any disturbing effect upon the digestive tract.

In my own experiments with pepto-mangan (Gude) I have exceeded the limits of its indications hitherto maintained, inasmuch as I became convinced that this preparation should not be confined especially to cases of chlorosis and anemia, but would effect improvement in other diseases attended with weakness and exhaustion, or at least maintain the nutrition of the patient, since the peptone which it contains acts as a nutrient and deserves consideration. On this point of view I based the first series of experiments, consisting of 11 cases, in which the general result was very satisfactory. These comprise 1 case of tabes with gastric crises, 1 case of obstinate vomiting in pregnancy, 1 case of esophageal cancer with severe stenosis, 4 cases of diabetes mellitus of slight degree, 3 cases of the uric acid diathesis with arthritis, and finally, 1 case of leukemia. The second series of observations related especially to cases of chlorosis and secondary anemia, the latter comprising 14 cases, so that altogether 25 experiments were made.

In the following I have made a selection from the number.

J. P., aged 33 years, butcher's assistant, consulted me June 2, complaining of constant vomiting and very violent colicky pains which occurred soon after taking food of any kind. The vomited matter contained almost always the entire food ingested, and on one occasion a moderate quantity of black coagulated blood. Pressure upon the stomach was quite painful. The diagnosis of ulcer the stomach, to which the symptoms pointed, was discarded after a more thorough examination revealed symptoms characteristic of a tabes dorsalis. The patient within a short time had become markedly emaciated, having lost eight kilos in weight, He had acquired syphilis 12 years previously during his military service. The attacks affecting the stomach therefore proved to be gastric crises. After they had diminished in frequency and intensity under the use of hot poultices and strict diet, pepto-mangan (Gude) was prescribed at the beginning of July. At first three tablespoonfuls were given daily, added to milk, and later, when it was found that the preparation was well tolerated, it was increased to six tablespoonfuls. After the sensitiveness of the stomach had gradually subsided the patient could be discharged from treatment in the middle of August, having regained his weight with the exception of a trifle, while the crises had completely ceased.

In a case of uncontrollable vomiting in an anemic woman, 24 years old, during her first pregnancy, pepto-mangan was administered in the quantity of three tablespoonfuls daily, to which were added small amounts of cold milk. Hot applications with the thermophor were also employed. After less than four weeks the patient was discharged from treatment, improved, without any loss of weight.

(To be continued.)

BRIEF MENTION.

Anthrasol is a purified and decolorized tar, which has been found of value in dermal diseases.

In the summer diarrhea of children if the stomach is much irritated no food should be given for twelve to thirty-six hours.

Enzymol is a good pus destroyer. If you are not familiar with it you can get a sample by addressing Fairchild Bros. & Foster, New York.

If you wish to study optics take a course with the Golden Cross Eye, Ear, Nose and Throat College. They give correspondent and attendant courses.

We think this issue of the Recorder a pretty good medical magazine. During the next twelve months we expect to issue twelve more numbers equally as good.

We have used Burnham's soluble iodine in a large number of cases and find we can get the desired iodine therapy without the objections of the other iodine preparations.

The very best way to keep your razors, knives and instruments sharp is to use the dry hone made by E. A. Harrington, Waukesha, Wis., who deals honestly with all patrons.

If you want some booklets on late developments in therapeutics send to Dr. John Aulde, Kennett Square, Pa. The doctor will be glad to send you free of charge several, which are well worth writing for.

I have tried neurilla in cases of extreme nervousness, and have to report that it has done wonders. I believe that it is all that is recommended for it, and shall continue its use in my practice.—E. H. Blackburn, M. D., Loa, Utah.

The July issue of Suggestion is a fine number of this magazine of psycho-therapy. If you drop a line to the publisher, 4074 Drexel Boulevard, you can get a sample copy free. You will not agree with all the statements it contains but that's all right, for they will make you think and as you think you develop and broaden your own personality.

I have used sanmetto extensively in my practice and can recommend it in chronic cystitis and chronic urethritis. I have used it in pre-senile impotence with remarkable and brilliant results. I regard the remedy, after making crucial clinical tests in the above named diseases, as the sine qua non of all the remedies in these diseases.—Thomas M. Brown, M. D., Oakland City, Ind.

Last month we mentioned the consolidation of the Household, Ledger Monthly and Ev'ry Month. A further uniting of publications now embraces Piano Music Magazine, established by J. W. Pepper in Philadelphia in 1900, and Literature, Art and Music, the first issue of which appeared in 1902, thus five publications have been purchased by those who form the Household-Ledger Publishing Company. All

will be published collectively as the Household-Ledger. The July issue of the magazine contains much of value to the general as well as the home reader. Fiction, pictures, poetry, music, biography and household suggestions abound.

A few of the features of July Success are: "The Next President of Mexico—Juan de Alberto;" "The Habit of Not Feeling Well," by Orison Swett Marden; "The One Who Was Hated, The Story of a Weasel," by William Davenport Hulbert; "The Salmon Foot," by Joseph Blethen; "The Requiem of the 'Has Beens'," by Owen Hildare; "Citizens of Nature," by Julius Norregard.

I believe aletris cordial, Rio, to be a great remedy for the various uterine diseases. It acts as an alterative and tonic, far in excess of any remedy I have ever used. I used it on a patient with congestion of the ovaries, with happy results; also on a patient with dysmenorrhea, with good results. Aletris cordial, Rio, is certainly a fine uterine alterative and tonic, and fills the missing link in therapeutical agents in the treatment of uterine troubles.—W. T. Wilson, M. D., Bunker Hill, Ind.

The radical and permanent cure of hernia is a subject that every practicing physician should be familiar with. There are thousands of unfortunate patients afflicted with this weakness that would be grateful to you for permanent relief and you should make it possible to help them. We have just received a circular from the Ideal Chemical Co., St. Paul, Minn., descriptive of their method of treatment. It is full of information and gives strong endorsements of their treatment. Write to them for this circular, it will pay you.

Now is the season when hay fever sufferers commence coming for relief from this most annoying malady. Suprarenal extract in some form gives great relief. A good preparation to use is bioplasm adrena. The property of this combination of adrenal with bioplasm combines the properties of the two products, and synergises them. In any irritation of the buccal, laryngeal and nasal membranes, taking the proper dosage dry in the mouth, and retaining it as long as convenient, will be found to remove the irritation or inflammation quickly. This local and general use of it will reduce hay fever and protect against relapse.

Many people suffering with tuberculosis think that if they could only get to California or Colorado the climate would cure them, without any effort on their part. This is a very great and so often a fatal mistake. Climate will help, but one must put himself in proper condition to give the climate a chance to aid him. One can get well at home if the general surroundings are made what they should be and he follows positive directions. Butler's positive treatment for consumption is so arranged that it can be successfully used in any climate. It is positive, systemic and systematic, and can be carried out to the letter, by any physician.

J. H. Tilden, M. D., of Denver, in the June number of the Chicago Medical Times, in an article advocating the use of tampons in gynaecological practice, reports. among others, a case which was characterized by severe reflex symptoms and which had not yielded to the treatment accorded by two other practitioners. Dr. Tilden's pro-

cedure was, the introduction of a glycerine tampon and the administration of antikamnia in ten grain doses (two five-grain tablets) to relieve the pain. The tampon was removed each night at bedtime and followed with hot water injections. The patient on being discharged, remarked, that since following this treatment she could run the sewing machine without the usual pain and tired feeling.

The June issue of the International Medical Magazine is a notable number, being devoted to the consideration of hyperchlorhydria. The following eminent specialists contributed articles: Prof. John C. Hemmeter, of Philadelphia, on "An Experimental and Clinical Study of the Etiology of Hyperchlorhydria;" Dr. Allen A. Jones, of Buffalo, on "The Effervescence Test for Gastric Acidity;" Dr. Boardman Reed, of Philadelphia, on "A Further Development of the Benedict Effervescent Test of Gastric Acidity;" Dr. John A. Lichty, of Pittsburg, on "The Relation Between Hyperchlorhydria and Neurasthenia;" Prof. Fenton B. Turck, of Chicago, on "The Treatment of Hyperchlorhydria." Dr. A. Robin, of Newark, Delaware, on "The Etiology of Hyperchlorhydria;" Dr. Max Einhorn, and others.

As will be seen by referring to our advertising pages, the Oppenheimer Institute, whose executive offices are at 170 Broadway, New York, now have in operation seven institutes for the treatment of alcoholic and drug diseases. They have made remarkable progress in the development of their business in the brief time they have been advertising in medical journals, and it is not to be wondered at when we consider their remarkably strong board of directors, to say nothing of their influential advisory directors, and latterly their woman's auxiliary, which shows that they are giving a great deal of their attention to the humanitarian side of their undertaking. The business is conducted in full accord with the principles of medical ethics, which, together with their splendid record in relieving cases of alcoholic and drug diseases, has put them on a firm footing.

A very frequent condition for which the practitioner is consulted is suppression of the menses owing to exposure, to a cold or to mental emotion. To restore the flow in these cases and to prevent the occurrence of uterine disease during the period of its re-establishment the administration of Hayden's viburnum compound is very useful owing to its soothing effect upon the nervous system, its antispasmodic action, and its power of reducing congestion, thereby preventing inflammation. In cases of true amenorrhea, such as occur from change of climate, overwork, malnutrition, anemia, chlorosis, phthisis and other exhausting diseases, the systematic administration of Hayden's viburnum compound, in connection with general hygienic, dietetic and supportive treatment is of great benefit. It will relieve the distressing symptoms occurring especially at the time when the menses are due, such as neuralgia, flashes of heat and cold, colicky pains in the abdomen and also promote the return of the flow owing to its tonic action upon the relaxed generative organs. If the amenorrhea be due to uterine disease this preparation will be found a most efficient adjunct to other measures. Is is especially indicated in cases in which the absence of menstruation is due to a poor development of the uterus, being administered in connection with faradism, dilatation, massage and other measures.

The Wisconsin Medical Recorder.

A Monthly Journal of Medicine and Surgery, Devoted to the Best Interests of the Whole Profession.

VOL. VI. JANESVILLE, WISCONSIN, AUGUST, 1903. No. 8.

LEADING ORIGINAL ARTICLES.

PRACTICAL ELECTIVE SURGERY FOR THE GENERAL PRACTITIONER.

By Charles C. Miller, M. D., 100 State Street, Chicago, Ill.

The physician, located in the country or smaller city, without a convenient hospital available, will find ample opportunity for the performance of safe elective operations for the relief of abnormal conditions. Partly from lack of experience and partly from timidity, brother practitioners in the neighborhood will refuse to attempt a surgical cure for these cases, and the progressive man who operates will soon enjoy a prestige, which he could gain in no other way so easily or so rapidly, making these cases doubly valuable to him.

To insure success, the practitioner must have a good general knowledge of the preparations necessary for the modern operation, know a simple technic for the operation and be acquainted with any possible dangers which may arise, and be master of a means of meeting such dangers promptly, even though they be remote and unlikely to present.

In these articles I shall describe the preparations for operations, then anesthesia and its possible complications, this to be followed by a description of the means of treating possible complications of all operations, and then consider the technic of a number of our more valuable, safe, elective operations. In the consideration of the different operations, the simplest will be considered first and then progressively more and more difficult operations. As the child crawls before walking, so we will find in surgery, the surest path to its successful mastery is a progressive one.

Many men fear that they have not the right temperament to become successful in this line of work, but if they are masters of the situation, and then progressively attack these cases, as they are enumerated in the series, they will find that all doubts and fears are dispelled, and they have in its place the pleasant satisfaction of success.

ASEPSIS.

A few years ago all operations resulted fatally in a certain per cent. of cases. This was owing to the infection of the patient with disease producing germs, at the time of the operation. These germs produced the various forms of sepsis, or what is commonly called "blood poisoning." No patient was

safe following operation, and many died. Wounds healed with great uncertainty, some in a few days, but usually after months, during which time inflammation, pus formation, fever and emaciation made all who saw justly dread an operation. All this was due to micro-organisms, and today we prevent these unpleasant sequelae by securing a field free from germs before attacking surgically.

The field of operation and all things coming in contact with it must be rendered sterile, or free from germs, if we hope to prevent this infection. We have several means of accomplishing this. First, by mechanically removing the bacteria; second, by destroying them with certain chemicals, and finally by subjecting them to a high temperature, which will effectually destroy them. All articles are considered infected until sterilized by some reliable method.

MECHANICAL CLEANSING.

Mechanical cleansing will play a part in the preparation of all things used in or about the field of operation, and also the hands of operator as well as the field of operation.

Prolonged scrubbing of a skin, which is not too rough, will render it surgically clean. This has been demonstrated in many of the best hospitals, but our operator in the country will find that it is better to combine the mechanical efforts with the use of the stronger chemical antiseptics, because in most instances conditions will not be such as to permit of the entire removal of bacteria present. In the use of antiseptics the operator must stick to those which have been thoroughly tested experimentally and demonstrated clinically as being effective. Where heat can be brought into play, no more reliable means of securing an aseptic condition will be found.

LIGHT.

A room should always be prepared for an operation if possible. All that is required is that it be clean and light. Much is said regarding a north light, but in many instances a stronger light is desirable. In abdominal surgery it is advisable to have a light which will not too brightly illuminate external surfaces and throw the recesses of the cavity into shadow. In other operations, where such conditions do not exist, the operator need have no fear of having too much light. It is not to be forgotten that the older the operator the stronger the light required.

PREPARATION OF ROOM FOR OPERATION.

Remove all unnecessary furniture, draperies and if possible the carpet as well. The floor is to be scrubbed with soap and water, and this followed by a strong antiseptic solution. Bichloride of mercury one to one thousand, carbolic acid two per cent., or a formalin solution one to two or three thousand will prove most effective.

Where the walls are of wood, it is well to thoroughly scrub with soap and water, then use the antiseptic solution as upon the floors. Papered walls should be wiped down with a cloth moist with one of the antiseptic solutions mentioned above.

The above preparations will be for more important operations, lasting some time, and where ample time can be taken to get the room ready. If the operation is a short one, or if it is necessary to operate as soon as the cleaning has been completed, we will find it often better not to disturb many of the articles in the room. Pictures, curtains and other articles out of the way, and not likely to be disturbed during the operation, are best left alone, as in moving them we will stir

up a dust, and endanger our wound from infection in this way if the dust has not settled before operation. The carpet can be left in place and covered with a number of sheets wet in a bichloride solution. If we have none too many sheets we can cover that portion which is not likely to be walked upon with wet papers. Dampening it will be sufficient, where these previous methods cannot be practiced. This will prevent dust from rising, and render the floor quite safe.

TABLES.

Tables are to be scoured and scrubbed until free from all visible dirt, then they are to be scrubbed with a clean brush and an antiseptic solution. Where rough and full of cracks and corners, which cannot be rendered satisfactorily clean and several days are to elapse before the operation, a coat of white paint may be used with advantage, especially if the operation is an important one.

Where we wish to do an intra-abdominal operation in the private house we should by all means be prepared to secure the Trendelenberg posture. If a simple table is to be used, we can improvise with a chair to secure this position. The chair should be prepared by careful scrubbing, and then should have the back wrapped with a folded sheet and secured so as to make it suitable for the reception of the patient. Bandages should also be fastened to it, so that it can be secured, as we can never tell when a patient may cause difficulty under anesthesia, and without proper provision we may have the patient upset during the operation.

WATER FOR THE OPERATION.

It is most difficult to secure a water in private practice which is fit for use during surgical work. We will find many of the waters, which are apparently clean, when heated will at once become turbid, or throw down a precipitate of foreign material. Such a water, if it must be used, should be filtered when possible. Straining through a number of clean towels will hardly prove safe, although it will be the only provision we can make in some cases before boiling it. If a water is perfecfly clear and free from foreign matter to all appearances, boiling for a half hour may render it safe. Where possible we can secure a safer watar by boiling it for a half hour on three successive days. This will give time for the development of spores and their destruction when matured. The water, if bad, may be replaced at an advantage by distilled water. Five gallons can be easily transported to the place for operation in a large clean jug. It should be boiled before using.

VESSELS FOR THE OPERATION.

Vessels and basins to be used at the time of the operation should be scoured and scrubbed, and if possible all placed in a large vessel and boiled for a half hour in clean water. A carbonate of soda solution, at the boiling point, makes an efficient antiseptic solution, and has a decided advantage in dissolving any greasy dirt which may be adherent to the vessels. It makes in this way a solution, which is of decided value.

TOWELS AND SHEETS.

Towels and sheets to be used in the operation are to be thoroughly washed and boiled and then carefully ironed on a clean board as a preliminary measure. They are to be carefully sterilized in a steam sterilizer before the operation.

THE STERILIZER.

In country practice the ordinary steam sterilizer will be found most

valuable. An inexpensive one will prove satisfactory and efficient. It should have a capacity of at least one cubic foot. One somewhat smaller may be found more easily transported from one place to another, but it will necessitate the sterilization of the necessary articles for a more important operation in two portions, which is rather inconvenient. Five dollars will purchase a good durable sterilizer.

SHEETS.

From two to a half dozen sheets can be used to advantage during an operation. The tables for the instruments can be protected by a folded sheet which has been sterilized, and in this way the use of instrument trays avoided. This method of placing the instruments has another advantage, in that the instruments are usually more accessible, when so placed. The portion of the body above and below the field of operation can also be protected by folded sheets, thereby minimizing the chances of infection. In the absence of gowns for operator and assistants, the body may be covered by a sheet. The disadvantage of their free use lies in their bulk, they being much larger than is necessary.

MUSLIN TOWELS.

To take the place of sheets, and towels to an extent, I have been using for the last two years towels made from one square yard of good muslin, This towel is very inexpensive, and is easily cleaned. The bulk of a yard square of muslin is less than that of a towel of half the size, and it protects double the area. It is also useful for covering tables for the instruments, a double thickness on a table being ample protection, especially, where the table is dry and has been properly cleaned beforehand.

The towel of this type can also be used to an advantage in improvising a gown for the protection of the operator. One around the body and one as an apron hanging from the waist down will cover the body satisfactorily.

A dozen of these take up but about the space of three sheets, and they can be utilized to a much greater advantage. In the absence of other towels they can be used in their stead for any purpose.

Any operator can find someone who can cut the muslin for him and hem the edges which are likely to fray. This will be all the preparation they require outside the proper cleaning.

STERILIZATION.

In sterilizing with the steam sterilizer, the towels and dressings should be exposed to the effect of the steam for at least an hour, and if possible they will be more safely sterile if two hours is given to the steaming. No harm will come to them in the sterilizer, and if the instrument works properly they should come out quite dry.

Where we cannot have the advantage of the steam sterilizer, clean towels and sheets can be wrung out in a one to one-thousand bichloride solution and used in the place of those which have been steamed, but this method is not nearly so desirable as where we can have dry sterile towels and sheets.

DRESSINGS.

Gauze, bandages and cotton for important operations is best bought sterilized and in impervious containers, which can be opened at the time of operation. This will prove more convenient for the country surgeon, and the expense is not so very great. The packages, if only partly used, can be kept closed, and immediately

before the next operation, they can be sterilized in the steam sterilizer. If the surgeon does not care to trust the firm putting up the sterile dressings, he can always resterilize the articles in the steam sterilizer before using.

INSTRUMENTS.

Always, if possible, the instruments are to be sterilized by boiling. The use of chemicals, while quite safe, is never as satisfactory. By boiling in a carbonate of soda solution, about a half ounce to the quart, the instruments are rendered sterile more quickly than in the plain water, and the use of this agent has a decided advantage in tending to keep the instruments bright and clean. This agent (washing soda) is very inexpensive, and can be easily secured in any community.

Soaking the instruments in a five per cent. carbolic solution will sterilize them if all visible dirt has been previously removed by thorough scrubbing.

SUTURES AND LIGATURES.

Catgut, which will be used for buried sutures and ligatures, is best bought in sterile condition. The preparation of so many other things will exercise the patience of the country surgeon to such an extent, that he is likely to slight his work, if he attempts too much. The added expense of using ligatures, which have been purchased ready for use, will be slight.

Silk, too, is best bought in a sterile condition and in sterile containers, though by prolonged boiling with the instruments, it can be rendered sterile.

Silk worm gut need not be previously sterile, as it can be boiled a few minutes and rendered safely sterile. This latter material will prove the most useful material for all sutures, which are to be removed.

Horse hair will prove of some service in closing incisious upon the face and hands, but as a general rule will not be needed.

THE HANDS OF THE OPERATOR.

In general practice the hands are frequently brought in contact with parts where virulent bacilli are found in great numbers, and as a result they will probably more often have upon them these germs, which the surgeon is ever avoiding. But even when the surgeon avoids those cases which are known to be septic, or in which the more virulent bacilli are present, he can never tell when he is going to have his hands contaminated from some apparently innocent article, so that in this respect he can feel to be at a decided advantage over the general practitioner, only when his hands are in a better condition. If possible, the general practitioner should keep his hands as smooth as does the surgeon, and with nails short and free from accumulated debris, for at any time he may be called upon to attend a case where an infection would be fatal, and where protection with rubber gloves is impossible.

RUBBER GLOVES.

Under all circumstances rubber gloves have proven to be superior to the naked hand in maintaining an aseptic condition of the surgical field. The hand, it is true, should be as carefully prepared for operation, as though we were to operate without them, so that they are in no wise a convenience, but the fact remains that less cases suppurate, where they are used, and consequently in operations of any considerable importance they should always be used. They will prove of special value to the general practitioner in doing surgical work, as by their use he can avoid infection in many more cases than he would be able to without them.

CARE AND VALUE OF THE GLOVES.

The gloves are to be thoroughly boiled in plain water or a solution of creolin, which agent is an antiseptic and at the same time it will facilitate drawing them on, as it is a good lubricant in solution. The hands are to be prepared in the same manner as if the gloves were not to be used.

Gloves which are amply large are fully as convenient as those which fit snugly, and they have the great advantage of being much more readily drawn upon the hands and removed. They will wear longer as a result, being less likely to rip.

The light weight glove is somewhat cheaper than the heavier grade, and while not quite as durable they interfere less with the sense of touch and are to be preferred to the heavier grades. Finally general practitioners should always use the rubber glove in obstetrical work. If a case of puerperal sepsis develop, the people are more prone to feel that all due precautions were taken. The real advantage will lie in the fact that the operator will have less cases of infection.

PREPARATION OF FIELD OF OPERATION.

The part to be operated upon should be shaved. This is to be followed by a thorough scrubbing. Then the skin is to be washed with ether to remove any fatty material, and again scrubbed with clean brush, soap and water. If a part is covered with thick roughened skin, a soap poultice is to be applied. That is clean gauze is wet and soaped and applied. This will soften all loose dead cells and a subsequent scrubbing in a few hours will cleanse the parts. Under other circumstances, a simple dressing of sterile gauze is applied. The scrubbing is repeated at the time of operation and is followed by the use of the bichloride solution.

(To be continued.)

INJURIES TO THE EXTREMITIES FROM EXPLOSIVES.

By Thomas H. Manley, M. D., Ph. D., New York.

Professor of Surgery, New York School of Clinical Medicine; Visiting Surgeon to Harlem Hospital; Visiting Surgeon to Metropolitan Hospital, Etc.

The effects of injuries from explosives in civil life present several special characters, quite distinct from those we witness after railroad or machinery accidents; as the instantaneous shock, the violent concussion of the cerebro-spinal system, and dreadful fright, constitute serious complicating factors.

The explosion of a gas-main. an engine, boiler or a retort, is accompanied by a thunder-like detonation and a widespread vibration, to be followed almost simultaneously by the crash of a body or a limb.

Of late years, explosives of great energy are utilized in blasting for excavations, tunneling and mining.

Manhattan Island, New York city proper, is made up largely of a geological stratum of rock, and hence, in building and tunneling here, we witness a considerable number of blasting accidents.

Many involving the extremities have come under my care.

In one case, a man had both arms torn from the body, below the shoulders. He made a good recovery. In another, both femora suffered fractures. There was no loss of blood, but the patient was of a deadly pallor and sank before morning. On autopsy, no lesion of the viscera was discovered.

Death was clearly attributable to shock. A considerable portion of those thus injured are employees; but quite a few suffer serious blasting injuries who are pedestrians or resided in the locality where heavy blasting was carried on.

I saw one case, of a man who was passing an excavation, when a rock struck him on the calf of the leg, fracturing both bones. There was no opening of the integument; but the foot was stone-cold and the following day had to be amputated.

In another instance of blasting accident, the patient, a young man, sustained an extensive shattering of both femora. Both feet were stone-cold when he entered hospital, and cardiac depression was most marked. He died the same night. The autopsy, the following day, revealed no gross lesion of any viscus.

In a case of crush through the anterior segment of the foot by a flying boulder, the shoe was cut through and the toes reduced to a pulp. A mediotarsal amputation was performed and the parts promptly united; but it appeared the osseous structures posteriorly had sustained interstitial damage, because, six months later, an insidious form of osteo-myelitis, followed by mollities-ossium occurred, requiring a consecutive amputation above the ankle joint.

Crushing in blasting accidents present the same general characters of wounds from shells and heavy shot in war; but in many there is a well accentuated, coincident complication of psychical disturbance.

The shock of the explosion, the crash, the shrieks of the terror-stricken, combine to seriously, immediately and remotely derange the mental equilibrium and the nervous system.

In blasting disasters of great magnitude, the shock to the nervous system may lead to more serious consequences than the traumatism of a limb. In this respect, they bear a close analogy, in their effects on the system, to collision accidents on railroads, wherein though the patient may sustain comparatively trivial tangible injury, yet the shock to the nervous system may indefinitely invalid him. This is most obvious when a female is the victim.

The following is a somewhat illustrative example:

On the afternoon of March 5, 1894, at a blasting accident in the Harlem district of New York, five persons were seriously injured and one killed.

There were three women and two men. One woman who only sustained a flesh wound of the leg near the knee and closed-fracture of the leg near the ankle, died during the night. She was in a state of extreme agitation in addition with great depression of the vital powers on entrance, and no description of stimulation could arouse re-action. There was no evidence of organic disease. An autopsy was refused. A young woman who was struck on the shoulder by a piece of falling timber, and six months pregnant, the morning following was delivered of a still-born infant. The third woman, nearly sixty years old, sustained dislocated humerus and scapula with several contusions of the body. In the course of recovery, trembling-delirium was the most troublesome feature of the case. The two men, one of whom had a severe contusion of the back, and the other a large scalp wound, made rapid recoveries without any special neurotic symptoms. In this accident, the occasion for fright was very great.

Criminal carelessness was the cause. A heavy charge of dynamite was ignited in a massive ledge of rock just across the street from the house in which these persons were injured. On the explosion, a rock weighing more than a ton was thrown high up and came down with a crash through the roof and four stories to the cellar. It was said by those near the spot, that the detonation of the explosion was deafening, and that the ground trembled, to be followed in an instant, by the loud crash through the building.

Although a mangling of any part of the body is a serious result of a blasting accident, the effeets of shock alone on the sensorium and physiological processes may be no less serious in its consequences as the following case illustrates:

A young woman four months advanced in her second pregnancy, one afternoon while standing at a table ironing was suddenly palsied with fright, by a large flying piece of rock crashing through the window; striking the top of the stove, it crashed through, scattering the hot coals about the floor. I saw the woman that evening, when she was suffering from the effects of shock. She, however, made a rapid recovery and was soon about. She went to time, but was delivered of a species of a monstrosity. The infant had a spina-bifida, cleft-lip and palate, with double club-foot.

In great mangling of a limb by a missile projected by a blast, when it is so disorganized that no hope of saving it remains, we can appreciate the importance of delay in many instances, until the patient rallies well from the simultaneous physical and psychical shock sustained.

PHYSICS OF THE X-RAY.

By Dr. Gordon G. Burdick, Chicago, Illinois.

Chief Surgeon Peoples' Hospital: Professor Radio-Therapy and Photo-Chemistry, Illinois School Electro-Therapeutics: Associate Professor Surgery, Post Graduate Medical School; President Chicago Electro-Medical Society.

(Continued from page 217, July Recorder.)

THE ANODE.

This important part of an X-ray tube is not generally well understood, by our American makers. In attempting to simplify the construction of the tube, they have generally made the anode serve the purpose of the target, with the result that the cathode stream is slowed up by meeting the anode stream of corpuscles bound the other way, and it produces an apparent paradox of a low tube when viewed upon a screen, while the tube itself will back up about six inches of air, across the prime conductor.

This phenomenon is due to the slow speed of the hydrogen corpuscles and partly due to the interference between the cathode and anode stream, and to another curious fact, that the positive current, while it has very little effect upon most metals in a tube, does throw off ionic platinum in great quantities, and as is well known, this metal produces "Catalysis" both in and out of a tube. The consumption of corpuscles is accelerated by the chemical formations they are compelled to form under the influence of the platinum ions, rapidly destroying all the free corpuscles in the tube.

The attempt to overcome this difficulty has been made by substituting nickel for the platinum, but without much apparent success as it seems to be a practical impossibility to drive all the gas from a heavy piece of metal. Moreover the melting point of nickel is so low that it has been found imperative that it be faced with platinum, in order to withstand the terrific bombardment of the cathode stream.

In the Jackson-Crookes type of tube now adopted as a standard by foreign makers, it has been found expedient to make a separate anode of aluminum for the ingress of the current, while the target could be faced by a heavy platinum strip backed with nickel, electrically welded together to prevent the platinum from springing off from the nickel, so in order to overcome the next problem observed in the tube, aluminum or steel jackets have been adopted of such a size as will give a large radiating surface to keep

the target reasonably cool during heavy work.

Tubes constructed in this manner are not open to the same objections as the American type, as it is found in practice that only sufficient current finds its way into the target to cause it to become strongly polarized, and at the best a very small amount of platinum ions is thrown off, to distub the vacuum.

It is a misfortune that makers do not use some substance besides metals, to construct the target, as there are many known to chemists that would serve the purpose far better—one of the most promising compounds known to chemists is the "carbide of silicum," which can not be melted in the hottest furnace, does not throw off gas, and is a fine conductor of high potential electricity.

The extreme difficulty of working this most refractory compound however, and ignorance of its existance by most makers of tubes, has prevented its use for experimental purposes. It is certain that it is along this line that the next great advance must be looked for, if we are to continue to use the glass tube as our source of radiation, as the generating apparatus is far in advance of the efficiency of the best tube made. There are many reasons to believe that in the near future other means of generating the X-ray will be found, as the radiation has been obtained in several other ways, out-side of the exhausted tube, but not in sufficient quantities to make it a commercial success. They have been found however in a greater intensity than was obtained from the original Crookes tube, used in the begining of the discovery.

A successful tube should contain an anode that will radiate heat nearly as rapidly as it is formed, as the energy of the cathode stream may be transformed into either X-ray or heat, and the hotter the target gets, the more energy of the cathode stream is transformed into heat, until the target is brought to the melting point, when no X-ray is given off, but the tube is filled with a shower of ionic metal, and the vacuum is destroyed.

The most satisfactory photo-chemical ray is obtained from a target giving a dull red heat, maintaining that color throughout the exposure. If more current is passed through the tube no increase of ray is obtained, but more of the energy is transformed into heat.

It is exceedingly difficult to find a tube today that will stand enough energy to give a normal hipjoint exposure, and when experts find such a tube money would not buy it. It is found now and then that a tube has a peculiar idiosyncrasy of transforming the cathode stream into X-ray, and is capable of standing prolonged exposure without danger while one hundred tubes made under the same condition, and showing no difference in construction, must be nursed and coaxed for some weeks before skiagraphs even of medium difficulty can be taken.

Thousands of dollars have been spent by makers, trying to overcome the known defects of the tube, and with great success so far as they have gone.

The Gunlach people have enclosed a large steel tube freed from gas by prolonged anealing, which radiates the heat as fast as formed. The platinum target is set into this tube, and backed with a large plate of nickel, electrically welded. This type will stand the most energy of any make upon the market.

In the Voltohm the makers have supported a round, heavy copper disc, faced with platinum upon a large rod of iron, which is relied upon to radiate the heat as fast as formed. The wonderful degree of penetration obtained with this type is off-set with the failure of the regulator to work. The tube must be nursed along care-

fully for several weeks before the gas is all driven from the disc of copper, and the tube cannot be left to itself for a minute with safety, because if the copper gets too hot the copper ions will completely fill the tube, and destroy its vacuum.

If the tube is used carefully, eventually it becomes a fine skiagrapic tube for a short time, when suddenly the tube becomes too high for use, and upon trying the alleged regulator it is found that it will not work, so resort must be had in baking in order to break up the chemical combinations of the corpuscles, a disagreeable job as the terminals of the tube are sealed on with sealing wax. Another exasperating quality of this tube is its penchant for losing its vacuum suddenly while not in use, and showing no evidence of puncture, so that repair is impossible.

In the R. F. tube for heavy work, an attempt has been made to overcome the difficulty by using a water cooling device, with fair success, still short of the requirements of actual laboratory work.

This tube is a beautiful piece of workmanship, but it is open to greater improvements before it will fulfil all that may be reasonably expected of it. It is probable that this tube would serve the purpose, if the head of the anode were drilled and milled, and before hermatically sealing the joint, milling out the center of the anode, so that the water would circulate freely in the metal. These tubes are probably the most satisfactory tube on the market, and have only one exasperating feature, many of them are constructed in such a careless manner, that the platinum wire leading to the cathode does not form a connection, leaving a small spark gap of $\frac{1}{16}$ of an inch, and it is a curious fact, that, while the current will pass readily, three inches in the tube, between the target anode and cathode, it will not jump this small gap, but prefers to spray over the tube outside. This defect has been known to the makers for over a year, but apparently no efforts are made to overcome it.

The trouble usually occurs after the tube has been in use for a few days, and as far as I know, can not be foreseen by the best observer.

(To be continued.)

1.—THE OLIGEMIC UTERINE ZONE (ZONA UTERINA OLIGEMICA.)

2.—ANASTOMOSIS OF RAMI LATERALIS.

3.—UTILITY OF THE OLIGEMIC (EXSANGUINATED) UTERINE ZONES.

By Byron Robinson, B. S., M. D., Chicago.

1.—An oligemic uterine zone is an area of few blood vessels and little blood. The oligemic uterine zones were studied through the aid of the X-ray, corrosion anatomy, colored injections and dissections. The accompanying cuts will demonstrate this better than a description in words. An oligemic or practically bloodless zone of the uterus is a territory which is supplied almost entirely by capillaries or arterioles. It is an area which incised in the resting uterus would not cause fatal hemorrhage. The line of coalescence on the bilateral territory of the rami laterales uteri, the divergence of the rami laterales uteri from the uterine trunk segment or the separation of the rami laterales uteri is what constitutes the oligemic zones.

The oligemic uterine zones are due to (a) defective or limited bilateral coalescence of the rami laterales uteri (b) to dichotomous divisions of the rami laterales uteri; (c) to the separation of the rami laterales uteri.

Surgically or practically the resting

uterus is oligemic, almost bloodless or exsanguinated in the center of its longitudinal axis, at the lateral cervical borders, at the central fundus and in the central and dorsal territory between the ramus cervicis and distal ramus corporis.

A AND B. THE BILATERAL CERVICAL OLIGEMIC ZONE. (ZONA BILATERALIS OLIGEMICA CERVICIS.)

The most important oligemic uterine zone is found on the lateral borders of the cervix, due to the dichotomous divisions of the ramus cervicis uteri. This zone is frequently lacerated in parturition or instrumentation, but if the ramus cervicis, or one of the larger divisions are not ruptured the hemorrhage is limited.

As may be excellently observed in corrosion anatomy the ramus lateralis cervices or cervico-vaginal artery bifurcates, divides before it arrives at the border of the cervix into a dorsal branch and a ventral branch which supply the ventral and dorsal cervical wall.

In the bilateral boot jack angles formed by the bifurcations of the cervical arteries the border of the cervix projects and is supplied by a limited quantity of blood. In the usual lateral cervical laceration which occurs in one or both these vascular boot jack angles the hemorrhage is practically nothing unless the laceration is so extensive as to rupture one of the arterial cervical arms. If the laceration be dorsal or ventral in the cervix the hemorrhage may be considerable.

C. THE CENTRAL LONGITUDINAL UTERINE ZONE. (ZONA UTERINA CENTRALIS LONGITUDINALIS OLIGEMICA.)

This oligemic uterine zone lies in the central longitudinal axis of the uterus at the junction of the lateral anastomoses of the rami laterales uteri. In the resting uterus this zone can be dissected longitudinally with non-fatal hemorrhage. Uterine bisection would be dangerous from haemorrhage in the menstruating uterus, and no doubt fatal in the gestating or puerperal uterus. This is the most useful oligemic zone in surgical intervention on the uterus. The author's operation of endometrectomy and partial myometrectomy is founded on this zone. Myomata may be extirpated from this zone.

D. THE FUNDAL OLIGEMIC UTERINE ZONE. (ZONA UTERINA OLIGEMICA FUNDI.)

This zone is an oval-shaped space situated on the proximal central funus. It is due to the dorso-ventral deviation of the rami laterales fundi. It is especially useful in Cesarean section, in myomectomy and in transverse or dorso ventral bisection of the uterine funus.

E. THE CERVICO-CORPORAL OLIGEMIC ZONE. (ZONA OLIGEMICA CERVICIS ET CORPORIS UTERI.)

This oligemic or practically bloodless territory is located at the junction of cervix and corpus uteri. It lies between the ramus cervicis uteri and the distal corporus uteri. It is due to the separation of the ramus cervicis and distal ramus corporis uteri. It is most distinct during gestation. It is useful in longitudinal bisection of the uterus, in amputation of the uterus at the os uteri internum, per vaginam or per abdomen or in myomectomy.

2. ANASTOMOSIS OF THE RAMI LATERALES UTERI.

The uterine anastomoses is not only transverse and perpendicular but longitudinally, especially at the uterine

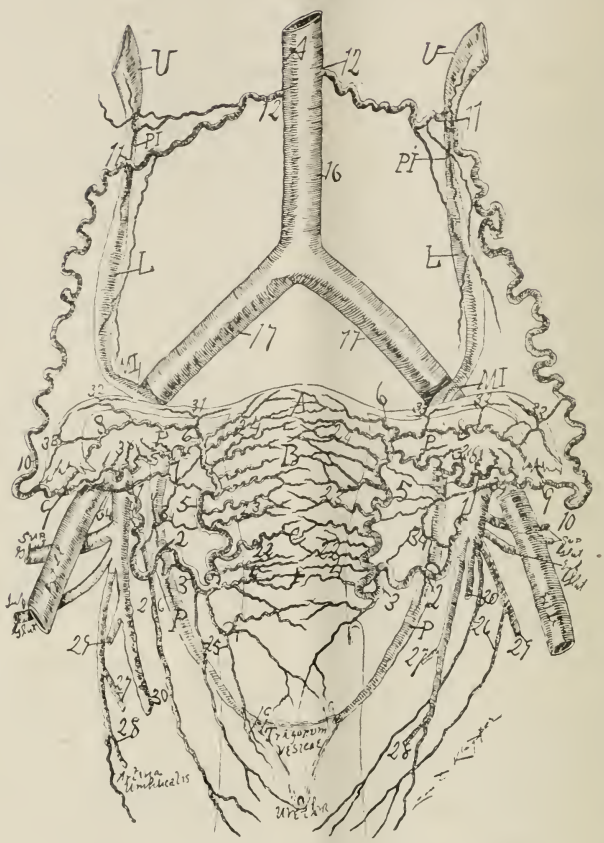

FIG. 1.

Woman 50 years old, illustrating the oligemic uterine zones. The mass of vessels and tissue on the dorsal wall I removed so that the utero-ovarian could be completely injected with red lead and starch. I then dissected the specimen under alcohol. The specimen was X-rayed and the X-ray was used as a model in drawing.

1, 2, 3, 4, pelvic floor segment of the utero-ovarian artery. The proximal (11), middle (M I) and distal (2) arterio-ureteral crossings. 3, cervical loop. (4, 5, 6,) uterine, (6, 8, 9—6, 7, 9,) oviducal and (7, 10, 11, 12,) ovarian segments of utero-ovarian artery. A, B, C, central longitudinal oligemic uterine zone. L, lumbar, and P, pelvic ureteral spindle.

FIG. 2.

Arterial circulation of the puerperal uterus, four hours postpartum, illustrating the utero-ovarian vascular circle (the circle of Byron Robinson): 1, 2, 3, 4, 5, 6, 7, 9, 6, 8, 9, 10, 11, 12, 13, 14, 15 shows the spiral segment (utero-ovarian artery); 16, straight segment abdominal aorta; 17, common iliac; 18, internal iliac. Divisions of the spiral segment: (1) Pelvic floor segment, 1, 2, 3, 4; (2) uterine segment, 4, 5, 6; (3) oviducal segment, 6, 7, 9, 6, 8, 9; (4) ovarian segment, 9, 10, 11, 12; (5) round ligament segment, 13, 14, 15; ureter, 20, 19; vaginal arteries, 26. Important locations in the spiral segment: Arterio-ureteral loop, 2; cervical loop, 2, 3, 4; distal arterio-ureteral crossing, 2; rami cervicis, 22; rami corporis, 23; rami fundi, 24; rami oviductus, 31, 32, 33. Oligemic (exsanguinated) uterine zones: (a) Central longitudinal axis: (b) lateral cervical border: (c) fundus; (d) cervico-corporeal; (x and y) is the atrophic bloodless fundus. At the postpartum the uterus was injected in situ; also the ureters with red lead and starch. The specimen was X-rayed in Dr. Harry Pratt's X-ray and Electro-therapeutic Laboratory, doubly magnified by Dr. Wm. E. Holland, and followed as a model by Mr. Zan D. Klopper, the artist.

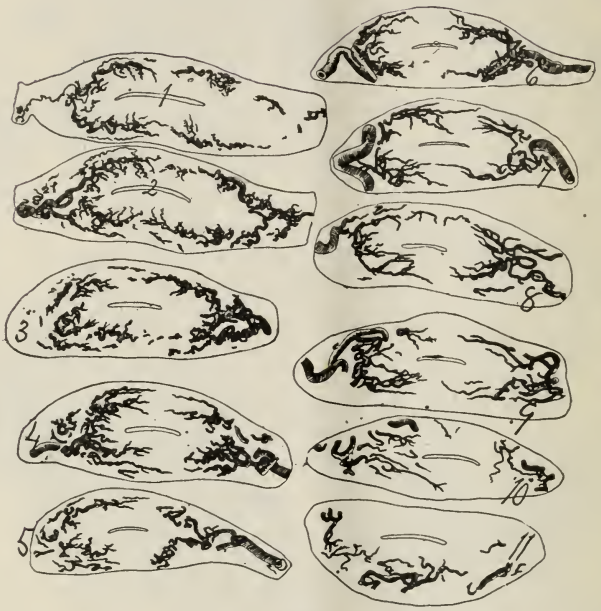

FIG. 3.

Eleven transverse segments of the uterus from cervix to fundus to demonstrate the distribution of its arteries. Multipara 32 years old. The uterus was well injected with red lead and starch. It shows the the bilateral oligemic cervical zones, especially at (2), where a vascular boot-jack angle appears, one vascular arm passing dorsally and the other passing ventrally to the cervix. The central longitudinal oligemic uterine zone is excellently demonstrated. The artist used the X-ray of each transverse segment as a model for the accurate placing of the vessels.

border. This is equally pronounced in the proximal lateral vaginal wall as is excellently observed in my dried specimen of the dog. During pregnancy the arterial system of the internal genitals (especially that of the uterus) experiences an enormous development highly manifest in the rami laterales uteri.

If the anastomosis between the lateral halves of the uterus becomes gross, or large as described by some authors, especially Luschka, it may be due to defect of development. The analogy of the anastomosis in the right and left half of the thyroid gland as compared to the uterus is now untenable as its anastomosis is less than in the uterus.

The arterial anastomosis of the lateral halves of the resting uterus in the middle line is very fine, resembling the capillary blood supply of other median coalescing e. g., abdominal wall and perineum. The lateral halves of the uterus coalesce from Miller's (pronephritic) ducts, and hence the anastomosis of the lateral uterine halves is a late acquisition. The uterus does not possess end arteries like the kidney, which do not anastomose at the periphery. It is doubtful whether fatal hemorrhage would occur in a longitudinal bisected normal resting uterus. However by injecting the uterus post partum six days, and pregnant about ten weeks through the right common iliac, abundant quantities of the injected fluid was found in the left common iliac a few minutes later. The longitudinal anastomosis, most marked at the lateral uterine borders is practically only visible in pregnant uteri in the middle line. The most perfect form of anastomosis, longitudinal transverse and perpendicular, may be observed in a recently delivered uterus of a woman or cow by making transverse sections, say ¼-inch thick placed under the X-ray. The various arterial layers in the myometrial, endometrial and perimetrial state are anastomosed by perpendicular connecting branches. The two lateral uterine halves anastomose by transverse branches. The superimposed muscular layers of the uterus are united by perpendicular branches, while longitudinal connecting branches unite the rami laterales uteri. The arteries of the cervix at the lateral uterine border anastomose freely with those of the corpus. The circulation of the uterus is solidly and compactly anastomosed in all directions, and hence an ovum may be implanted at any point of the endometrium or endosalpinx, whence it can call or induce blood currents from all points of the uterus. Since all rami laterales uteri or oviductus are similarly anastomosed and ovum implanted on the endosalpinx may call blood from all points supplied by rami laterales.

3. THE UTILITY OF THE OLIGEMIC. (EXSANGUINATED) ZONES.

A knowledge of oligemic or practically exsanguinated uterine zones is useful in indicating localities of appropriate surgical intervention. A knowledge of the various bloodless or practically exsanguinated zones of the uterus is of vast surgical interest. Its value is observed in longitudinal median division of the uterus and in myomectomy. It gives choice of surgical attack on the uterus. Bloodless surgical incising on the uterus should be directed: a, in the center of the longitudinal axis; b, transversely on the fundus as the long axis or dorso-ventral as the short axis; c, transversely on the corpus, fundus and cervix between and parallel to the rami laterales uteri; d, the lateral borders of the cervix are practically bloodless zones as is observed in the numerous bilateral cervical lacerations during parturition and instrumentation with slight hemorrhage.

The author's operation of endometrectomy with partial removal of the central myometrium is based on the anatomic fact that the central longitudinal axis of the uterus is oligemic or practically a bloodless or exsanguinated zone. Bilateral capillary anastomosis existing in the resting uterus. Hence the resting uterus may be boldly bisected longitudinally, the endometrium removed and as much myometrium removed as considered desirable after which the bilateral uterine segments may be sutured separately, sutured dorso-ventral for the control of capillary oozing hemorrhage.

The rami laterales uteri are practically arranged in transverse planes hence to enucleate a myoma it is necessary only to incise the corpus, fundus and cervix transversely.

DYSMENORRHOEA.

By J. A. Burnett, M. D., Brawley, Ark.

There are but few women who have not suffered from dysmenorrhoea at some time during their lives and there are many who have suffered from it at each menstruation from puberty to the menopause. The young girl who has just reached puberty is as liable to its visitation as the more mature woman.

The symptoms of dysmenorrhoea in different individuals vary according to the time the pain occurs, its severity, duration and the cause which produces it. Many patients suffer but a few hours, as the pain ceases when the flow is well established, while others suffer more or less during the entire period. From one to three days before the discharge makes its appearance there will be pain in the back and loins and the lower part of the abdomen and sometimes it extends down into the thighs. There is some difference in the pain experienced by different patients. Some complain of a simple ache, others of a neuralgic sensation, and others of a spasmodic variety.

Dysmenorrheoa is accompanied by constipation, nausea, great inability of the mind, faintness, headache and neuralgia, and occasionally there is tenderness and swelling of the breasts and abdomen. The cause of dysmenorrhoea is in many cases difficult to ascertain, as there are many causes. It may be due to exposure to cold, excessive exertion, heredity, trauma, ulceration of the womb, grief, excitement and excessive marital indulgence and also various other causes, for instance measles or scarlet fever, may arrest the development of the pelvic organs and cause dysmenorrhoea, and tumors may cause a pressure which will prevent a free discharge.

Young girls who through false modesty or ignorance of their parents who are allowed to reach the age of puberty without any knowledge of the function of menstruation, often by trying to wash away the discharge, thinking they are injured in some way, cause severe cases of dysmenorrhoea. Girls should be taught the function of their body through their parents, and not through curiosity be taught by undesirable companions, which often leads them to ruin, and they should never be taught to be ashamed of their sexual system before their parents, as false modesty should be a thing of the past, as nothing is more conductive to evil than ignorance. When girls are brought up in this way they will not have so many diseases peculiar to their sex, and will not so often be led astray. In the treatment of dysmenorrhoea the cause should be obtained if possible, and then removed. A thorough examination should be made of the entire body, the development of the breasts and external genitals should be care-

fully noted, as if these organs are well developed, it is very likely the external organs are well developed, and if the external organs are undeveloped, very likely the internal organs are undeveloped. While in the former condition it would be reasonable to suppose the cause was not due to mechanical derangement unless it was some morbid growth while in the latter condition it would leave some suspicion that the cause may be of some deformity. In this disease as well as most all diseases of women or in girl children the clitoris and rectum should be closely examined in order to see if the clitoris is or is not bound down by its hood, or whether it is irritated or contains any smegma under the glans, and whether the rectum needs dilatation or not.

There is not enough attention paid to examinations by most physicians in the treatment of any disease. In order to intelligently treat a patient with any diseases a thorough examination of the entire body should be made, and not a diagnosis made by a few symptoms as is often the case. We should use our hands, instruments and eyes in making a diagnosis as much as we use our tongue and ears, as neither one is a substitute for the other, and our work is imperfect enough when all are used. The bowels should be kept open in the treatment of dysmenorrhoea, and it is best done by enemata. If the liver is deranged it is not necessary to give a purgative, but a hepatic stimulant, chionia or pavara pills, are excellent hepatic stimulants, and as the pavara pills contain æsculus hippocastaneum, pulsatilla, leptandra and cascara they have a wide range or usefulness in many diseases of the female pelvic organs, and their action is so mild they can be prescribed for pregnant women, and another great thing about them especially to physicians, who do their own dispensing is, they are cheap enough that any physician can afford to use them. A hot hip bath given twice a day for several days before the period is due is of much value, and also a hot infusion of either caulophyllum thalictroides, satureja hortensis, hedeoma pulegioides leonurus cardiaca, polygonum hydropiper or authemis nobilis drank freely for a few days before the period and during the painful part of the period is of much value; the fluid extracts can be used in place of the infusions if they are the very best that can be obtained. If the pain is very severe an enema of a warm infusion of lobelia inflata, and cypripedium pubescens made in starch water will often relieve and if this should fail, an infusion of lobelia inflata, and cypripedium pubescens equal parts in hot olive oil or cocoanut oil put on a small amount of cotton (with a string attached, so it can be withdrawn) and pressed up the vagina against the mouth of the womb every twelve hours will in most all cases give relief, if not due to some mechanical derangement. Attention to the diet and hygiene of course should be closely observed in this as well as all other diseases.

DRUG HABIT.

By W. E. Nichols, M. D., Andrews, Indiana.

I want to speak briefly about the drug habit, not only the morphine and whisky habit but the patent medicine habit as well. Many will say: "Why does patent medicine form a habit?" The answer is easy. The majority of patent medicines on the market contain a large amount of alcohol, opium or cocaine, and thus induce or encourage dangerous habits, which often they profess to cure. The most of the patent medicine on the market contains more or less alcohol, from 17 to

44 per cent., while beer contains only from 2 to 5 per cent.

Undoubtedly the taste for stimulants in a great many cases originates from taking these so called "tonic" remedies which have done and are still doing an incalculable amount of harm.

Have you ever stopped to think of the amount of sales in a year of patent medicines? It amounts to the enormous sum of $65,000,000, and is increasing yearly.

So it cannot be wondered at that the drug habit is becoming a national menace, for the person who uses patent medicine awhile has to have his tonic or stimulant, and that the habit is increasing, the most accurate means of finding out is through the importation of two plants most commonly used for this purpose, namely, opium and cocaine. Since 1898 the population of the United States has increased 10 per cent., the amount of opium imported has increased to the extent of 500 per cent., and this despite the fact that it is less frequently prescribed by physicians than formerly. The importation of opium for 1902 was 712,000 pounds, with over 2,000 pounds of morphine, the importation of cocaine for 1902 was three times as large as in 1898.

It is impossible that there should be any such enormous increase in the legitimate demand for the drug.

I wish to speak particularly about the morphine habit. I have experimented with a great many of the so-called cures, and find that so long as the patient takes the "cure" that they can cut out the morphine, but to leave off the "cure," they have the same desire for the morphine as before, that is not a cure; a cure consists in taking away the appetite and all desire for the drug. I have never found anything that will do this so well as hyoscine hydrobromate. It is perfectly safe if used rightly, but it is a dangerous drug if handled improperly. I use it in the greater majority of cases, hypodermically, but with some cases I give it internally only.

I have treated some of the worst cases here, some of the old chronic cases, that have been taking the drug for the last twenty years, that used from thirty to thirty-five grains daily, to get any effect, and have taken all desire for the drug away in three or four days, of course they must always be built up for ten to thirty days afterwards, as the nervous system is always left in a bad condition, but the cases that only use two or three grains a day, can be cured in thirty-six hours. I know whereof I speak, as I have cured a great many, and they are cured, not simply separated from the drug.

As to cocaine the treatment only varies a little, but it is harder to cure than the morphine habit, while the whisky habit is easier to cure, but takes a longer time to cure, usually about ten days.

I find with my patients that after they take treatment for the cure of the morphine habit, that it takes away all desire for tobacco in any form, and when they are greatly emaciated they will gain as much as thirty pounds in the first month.

I never had a prescription that I would not gladly give to a brother M. D., and if any one wants my prescription for the cure of the drug habit I will gladly give it to him on request, and as each case requires a somewhat different line of treatment, dose, etc., I would like the details of the case, as I could not write a prescription that will cover all cases, but will say that the drug that does the work is hyoscine hydrobromate.

When what you have done in the past looks large to you, you have not done much today.—Hubbard.

DISCUSSIONS.

This Department contains each month case reports, letters, inquiries and replies from our readers. If you have a case you would like some help with, or a question to ask, write to us and we will publish it in this Department and you will get the opinions of our medical brethren. When you have an interesting case, write a report of it and send it in and it will help some one else We need each other's counsel so let us help each other from our experiences. Letters are desired from physicians on any subject pertaining to our profession.

"LUNGERS" IN SUMMER.

When the enemy ceases his attacks, then is the time to assume the offensive.

All chronic ailments of the lungs become less active as the summer heat increases. In fact, for all but the acute forms of phthisis, the history is of a partial recovery each summer, and a little lower descent each winter.

Too little advantage is taken of this period of partial recovery. The patient and the physician are so ready to believe that the worst is over, and that the improvement is the harbinger of better things. And yet our all but invariable experience to the contrary should teach us wisdom.

Every means should be employed to render this improvement as profound and extended as possible. I do not refer to the hygienic regimen, which goes without saying, but to the drug treatment. I believe in the drug treatment of phthisis, tubercular, and otherwise.

First, let us clear out incommoding matters from the pulmonary tract and disinfect it. Inhalations of camphor menthol are of value in clearing out the bronchial tract, disinfecting and stimulating the surfaces with which it comes in contact. Use one of the nebulizers that throw a very fine cloud, and you can use a 10 per cent. solution, followed by a much milder one to leave the tender surfaces protected by a coating of the petrolatum excipient. Have a similar apparatus charged with euarol. This is a mixture of europhen and aristol, one part each, with chemically pure fluid petrolatum, 14 parts. It has a deeper but slower effect than camphor menthol, penetrating below the surface farther than any other local mucous application with which the writer is acquainted.

Direct the patient to use the camphor menthol morning and evening, and whenever there is secretion to cause cough, or especially when it is fetid. I usually direct the patient to put in her spare time using the euarol, believing it is well to keep the pulmonary tract medicated with it as much of the time as possible. This application covers the internal use of iodine, stimulating the absorbents to remove debris and keep the perivascular lymph channels free.

Does it kill the microbes? I do not know. It may, or the benefit may be simply due to the clearing out of the lymph channels, enabling the leucocytes to penetrate freely.

Keep the bowels clear with a morning saline, just enough to do the work. Give calcium sulphocarbolate half a dram daily, to disinfect the stomach and bowels, and supply the lime needed for tissue building. Carefully reglate the diet, as with the above treatment it is apt to become ravenous, and to far outstrip the digestive power.

Add to this the careful, minute supervision that notes every trifle tending to debility or discomfort, and promptly applies the indicated remedy; that draws the delicate line at exercise and exposure, care, that enhances the vitality, but does not enervate.

Can we directly increase the vital force?

This question is still unanswered; as well as the further one of whether nuclein will do it. But those who have used this agent in suitable cases, are generally believers in it, especially when it has been pushed to maximum

dosage—far beyond the quantity that increases leucocytosis. Up to a certain point, varying with the make of nuclein employed, there is a steady increase in the leucocyte count. When this point is passed the number of white cells falls very fast, and the best results have been reported from doses far exceeding these. Is this fall preparatory to a great multiplication of leucocytes, indicating their subdivision? Or is there an unsuspected connection between a rebellious army of white cells and the tubercular processes?

Wm. F. Waugh, M. D.
Chicago, Ill.

A FEW POINTS ON THE TREATMENT OF RHEUMATISM.

In treating rheumatic cases we not infrequently encounter a class of patients who either are subjects of dyspepsia or have very sensitive stomachs, and it is in these cases especially that the salicylates must be administered with extreme caution, or even replaced by other remedies. We must consider not only the direct but the remote effect of the salicylates under these circumstances. When the acute attack is over such patients are often left with impaired digestive apparatus, which it requires years to restore to a normal condition.

It is therefore not surprising that the new salicylic acid derivatives, such as salol, salophen, salipyrin, etc., should have attracted so much attention. The latest, and, it seems to me, the most logical substitute for the salicylates is aspirin, or acetyl salicylic acid. According to its composition it contains about as much salicylic acid as sodium salicylate, but has some conspicuous advantages depending upon its chemical constitution. As it is unaffected by acid fluids it is not decomposed in the stomach, this taking place in the intestine, so that for this reason all gastric irritation is avoided. It seems also to be notably free from the unpleasant effects of the salicylate of soda upon the nervous system and heart, at least, I have never observed tinnitus, headache, or cardiac weakness during its use, and such literature as I have read bears out this point.

Lately a number of reports have appeared on a new local antirheumatic and anodyne which is said to be a very valuable auxiliary to the internal use of aspirin. This substance is a fluid having a faint suggestion in its odor of the oil of wintergreen, and is known as mesotan. Chemically it is an ethyl oxy methyl ester of salicylic acid and is recommended to be used in mixtures with olive oil equal proportions, or in greater strength, according to the sensitiveness of the area to which it is applied. The amount to be used at each application is from one-half to one teaspoonful of this mixture, which is to be rubbed in lightly and the parts covered with an impervious dressing. When the joints become less tender stronger friction may be used.

My experience has been too limited to warrant me in saying much of mesotan, except that it has been quite encouraging. In view of the fact that it has been shown to liberate salicylic acid in the tissues when rubbed over a rheumatic area, this having been determined by examinations of the urine, it would appear a very eligible remedy in rheumatic cases, since in this way we avoid burdening the digestive organs with medicines.

The few cases which I subjoin are illustrative of my remarks and I trust will make my method of treatment better understood.

Case 1.—Female, aged 45, had her

first attack of inflammatory rheumatism some twenty years ago, which confined her to her bed for a period of three months. No special treatment was given with the exception of a few ordinary family remedies prescribed by her old friends. The present attack was ushered in with malaise, chilliness and sore throat. The large joints were affected, and were swollen, exquisitely painful, and tender to the touch. The inflammation showed a tendency not only to spread from joint to joint, but to disappear absolutely from one, while it attacked the other. Her temperature rose to a moderate degree (102 degrees,) but fluctuated greatly and was extremely irregular in its course. The perspiration was copious and had peculiar odor; the urine scanty and high colored with an abundance of sediment of urates and uric acid. The digestive functions were to a great extent impaired, the tongue heavily coated, the appetite lost, and the bowels constipated. She was treated for a few days with sodium salicylate combined with codeine and colchicum, but soon showed marked intolerance to the salicylate in spite of repeated trials to compel her stomach to retain the drug. As our efforts failed I was obliged to discontinue its use and substituted aspirin in 5 grain capsules, every three hours, until relief was obtained, afterwards only four times a day. To our great satisfaction aspirin was easily tolerated by the delicate stomach of my patient, and she made a good recovery. Her only complaint was a slight vertigo which she experienced after taking aspirin, but this symptom did not last long enough to annoy her.

Case 2.—Female, aged 24, was taken sick with sharp shooting pains, running down the back of her thigh. Movements of the limb intensified her suffering. Among the subjective symptoms were tingling and numbness. These had a tendency to grow worse at night and on the approach of stormy weather. She had a moderate fever. Having made a diagnosis of rheumatic sciatica I prescribed aspirin in 5 grain doses, every three hours, until the pains had diminished, and later three to five times daily, according to the severity of the pains. Besides aspirin I also left a few heroin tablets of 1-12 grain each. These were taken with each dose of aspirin, and judging from their action they formed a good combination, heroin adding, so to speak, to the efficiency of the aspirin. After a few days the husband of my patient informed me that his wife felt so much better that she had undertaken to do her washing without any unfavorable after-effects.

Case 3.—Female, 48 years of age; general appearance that of a chronic dyspeptic. She gave a rheumatic history, having had several attacks within the past 6 years. Her digestion had been deranged for a number of years, and she was subject to continual constipation. She complained of sharp and severe pains along the ribs of the right side. These apparently neuralgic pains seemed to precede the eruption, which I observed along the spine at the exit of the intercostal nerves. This rash consisted of clusters of small vesicles situated upon an inflammatory base, and was evidently a herpes zoster of rheumatic condition. Her condition improved very rapidly under the administration of aspirin; the pains ceased, and for the first time in a month she was able to sleep.

Case 4.—Female, aged 60 years, consulted me for pains along the lower border of the ninth and tenth right ribs. These varied in character, being sometimes dull and again sharp and severe. I could not make a positive diagnosis. It was undoubtedly a form of rheumatic neuralgia. Assuming that the neuralgic element predominated I tried to relieve her pains

by anodyne and nerve tonics. The patient derived some benefit from the prescription which I gave her, but after a while she returned with the same complaint. This time I decided to make a trial of mesotan. I gave her a mixture of equal parts of olive oil and mesotan to be applied to the painful side with a brush, every two or three hours as required until relief was obtained, and the pains reduced to a minimum. After a number of days she reported that the liniment (mesotan) which I gave her the last time had done her side more good than anything she had ever tried. So in this case mesotan assisted me to make a positive diagnosis of pleurodynia and to exclude the purely neuralgic character altogether.

N. H. Kassabian, A. B., M. D.
Coopersville, Mich.

CYSTITIS.

Brother F. G. Thomason wants a good ℞ for cystitis:

℞ Nitrate silver, gr.ij or iij
Water, ℥j

M. Inject into bladder, let remain for a half minute and draw off by same catheter; repeat if necessary on second or third day. It works splendidly.

Methylene blue 3 or 4 grains three times a day and at bed time will cure chronic cases. The only trouble is it turns the urine a dark blue, but it does the work.

Jamaica dogwood fluid extract or specific (Lloyds) medicine in full doses is good. Don't expect such cases to get well too quick.

I have used injection of carbolic acid 5 to 8 drops, water 1 ounce, let remain for a minute and draw off.

An old friend wrote me some time since to use sulpho-carbolate zinc 10 grains, water 1 ounce, inject and draw off in one or two minutes.

Salol 4 grains four or five times a day aids any other treatment as it, like methylene blue, is excreted by the kidneys.

Dr. Ben H. Brodnax.
Brodnax, La.

THE CIRCLE OF BYRON ROBINSON.

THE UTERO-OVARIAN ARTERY.

There are circles of fame and fortune,
Circles with segments old,
With straight and spiral portions
Of worth fore'er told.

All that were true and noble,
All that were brave untold,
All that were born of trouble,
Sprang from that circle old.

During the age of Moses
The circle its part did play,
But the child of diagnosis
Was yet unborn that day.

Another still akin to fame,
That wears a halo 'round his name,
The fame of his circle hath e'er begun,
Proud genius and friend, Byron Robinson.

Mid the pomp of ancient laughter,
And dreams of seraph gay,
In the days of Japtha's daughter,
The circle its part did play.

Ancient kings with sayings famous,
Bright their crowns and deep their pathos,
But greater fame hath efforts won,
The circle of Byron Robinson.

C. A. Strasburg, M. D.

All men would live long, but no man would grow old.—Goethe.

Rundschau.

By H. Speier, M. D., Rochester, Minn.

MEDICAL RECIPROCITY.

Organized movement for medical interstate reciprocity, the necessity of which was becoming apparent, originated a couple of years ago in Michigan, and whatever practical results have been obtained so far have been gained through the profession of that state. It is pardonable, if the president of the Michigan State Medical Society pointed with pride to their accomplishment. Nothing in the desired direction having been achieved by the National Confederation of State Examining Boards, formed some years ago, nor the auxiliary committee of the A. M. A., at the instigation of the secretary of the Michigan board a meeting was held last April representing the states of Indiana, Ohio, Iowa, Kansas, Michigan and Wisconsin, and an organization perfected establishing reciprocity among those states. It is based on uniformity of educational standards. The agreement provides: That as a prerequisite to reciprocal registration, the applicant therefor shall file in the office of the board of which he is a licentiate such evidence as will enable the said board to certify that he is of good moral and professional character. Such certificate shall be filed with his application for reciprocal registration in another state.

Qualification 1.—That a certificate of registration showing that an examination has been made by the proper board of any state, on which an average grade of not less than 75 per cent was awarded, the holder thereof having been at the time of said examination a legal possessor of a diploma from a medical college in good standing in the state where reciprocal registration is sought, may be accepted, in lieu of examination, as evidence of qualification. Provided, that in case the scope of the said examination was less than that prescribed by the state in which registration is sought the applicant may be required to submit to a supplementary examination by the board thereof in such subjects as have not been covered.

Qualification 2.—That a certificate of registration or license issued by the proper board of any state may be accepted as evidence of qualificatian for registration in any other state. Provided, that the holder thereof was, at the time of such registration, the legal possessor of a diploma issued by a medical college in good standing in the state in which reciprocal registration is sought, and that the date thereof was prior to the legal requirement of the examination test in such state.

This is, indeed, a satisfactory beginning and it is to be hoped that other states will join the organization. The state society of Minnesota, favoring the movement, asked from the recent legislature the necessary modification of the medical practice act. But the wise statesmen turned down the request. Perhaps they thought that they had done enough in one session for the doctors of the state by creating a special examining board for osteopaths.

RADIUM.

The lay press, always eager for scientific innovations and prone to inflate them to unwarranted proportions, has lately entertained the public with

accounts of the marvels of the new metal radium and told how the blind may be made to see by it. It would be well to put a check on these exaggerated reports. But the matter is in the first experimental stage and exact information rare. Hence we welcome an account of what is really known of the effects of radium, as given in a paper before the recent international congress of chemists by Prof. E. S. London, of the University of St. Petersburg. He showed the material with which he experimented, 30 mg. of a brown, gritty powder. If the box containing the radium is approached to the eye in a dark room, a luminous space without sharp defines appears. In a diseased eye, one with a partially destroyed retina, the luminous field gives a representation of the defects in the visual field. When the retina is completely destroyed, the eye does not react at all to the radium rays. The crystalline lens weakens the effect of the rays, probably by mechanically retaining them. Objects in the room, upon which the rays are directed, do not become visible, because the rays are not reflected from their surfaces, but penetrate the objects and are partially retained in them. Attempts to use the direct effect of the radium rays upon the retina to cause visual perceptions in the blind have not been successful. Something has been accomplished, however, by making use of the ability of radium of causing fluorescence in a properly prepared screen. Shadows are produced on the screen by applying metallic objects to its posterior, or figures made of impermeable material, such as black paper or lead foil, to its anterior surface. This method has proven successful in a few experiments. Meagre results, altogether, and a very insubstantial basis for the reports of the lay press.

The radium rays have certain physiological effects upon the organism. A period, during which no change can be noted in the tissues, is followed by one of irritation and then destruction. On the skin results a characteristic dermatitis, leading to stubborn ulceration. The intensity of the effect depends on length of exposure, distance and amount. Not all tissues are affected alike. A deleterious influence has been shown on nearly every living tissue; animal and vegetable germs lose their faculty of growth under it. Mice exposed to radium rays for a few days sicken, are paralyzed and die finally by paralysis of respiration.

IMPROVEMENTS OF THE MICROSCOPE.

Modern biology and physical science have been made possible only through the modern microscope. The instrument, in the opinion of Prof. Helmholtz, the great physicist of the last generation, can make visible objects up to 1-25,000 of an inch. This is its limitation. According to recent reports two professors of Jena, Siedentopf and Zsigmondi, have discovered a method by which objects from seven to ten times smaller may be studied. It consists in a concentration of rays of light upon the particle to be observed amidst dark surroundings. The principle is the same as that which make formerly unperceived dust particles visible in a sunray falling into a dark room. The discovery is apt to have far reaching scientific consequences, opening up new worlds of life and matter. Perhaps certain bacteria which so far have eluded all research will now be found with ease.

SURGERY OF THE ANCIENTS.

Modern archeological research has unearthed cuneiform inscriptions dating from about the year 2000 B. C., known now as the book Haninmurabi. One of its chapters contains a report of an operation for cataract with the description of instruments.

THE DOCTORS' WORLD.

Therapeutic Briefs, Medical News Items, and Clinical Notes on Medicine and Surgery.

Flies.—No agent for spreading disease, especially typhoid, is more active than the common house fly. If the public could only recognize this source of disease, the amount of sickness and suffering would be much less. While the fly cannot be exterminated its numbers can be made so small as to be a small factor in spreading disease. The fly breeds in filth, but especially in stable manure. If no stable manure were accessible for their breeding places the number of flies would be small. Properly care for the stable manure and there will be few flies and less sickness. The Agricultural Department recognizing this has declared war on the fly, as well as on the mosquito. The Department recommends that stable manure be placed in a covered pit or tight shed inaccessible to flies; also that manure, drains, etc., be disinfected by liberal use of chloride of lime, which can be bought in quantity at a low price. In a communication on the subject to the Recorder Dr. W. H. Vail, of St. Louis, writes:

The fly is a profoundly nasty insect, dirty and filthy through and through. It loves the vilest of rottenness for its food, and is always found where filth abounds, its legs, feet and toes being loaded with the basest and most despicable of disease producing germs and bacteria, and with all this bounty of contaminating germs and filthiness it inhabits your very abode, day and night, wafts the air you breathe right and left and roams about your nose, mouth, body and crawls and lights on your vital sustenance, your food, with all this accumulation of vileness.

Don't talk about the good of the fly nor write words of praise of it either. It is everywhere in everything in a most active, persistent manner with all its infectiousness. It is the dispenser and contaminator of many loathsome diseases. Look to the prevention of disease, not the cure, first. The prevention of disease is the titanic and fundamental step, but most of the public and municipal methods are lacking in these pristine steps, working at the wrong end. Most valuable time and methods are privately and publicly devoted to the cure of diseases instead of to more vigorous preventive measures.

Clean up and clean out and keep the good work active incessantly, never relaxing for a day, and the obnoxious fly will be no more, then typhoid fever and other infectious diseases will be vastly diminished. We do not need this offensive pest as a scavenger. Keep clean and there will be no filth to draw these pests from whence they travel to transport the bacilli and germs of disease and death. See that the premises, the barn in particular, are thoroughly deterged at regular intervals, for flies lay their eggs in horse manure, and where this is allowed to accumulate, myriads of these summer objects will be found. Remove every dead animal as soon as possible, prevent the approach of a fly to the house of illness and watch carefully that nothing that comes from a typhoid fever, diphtheria, consumptive patient or others ill with any disease, as well as infectious diseases, is thrown out-doors to become the food for these nasty creatures to feed upon, walk or swim in and thus transmit to the human family. It is the duty of the city authorities and sanitary offi-

cers all over the world to perfect sanitary laws and rigidly enforce them.

Pertussis.—Whooping cough is one of the diseases of childhood which it is often very difficult to treat. A report of an experienced practitioner's methods of treatment is always of value. Dr. E. C. Rothrock's article on pertussis in the February Recorder was read with much interest by many physicians on account of the exhaustive review presented of the therapeutics of the disease. A host of remedies has been used to alleviate the disease and every practitioner has his favorites. Dr. T. W. Kilmer, of New York, has contributed a valuable article on the subject to the New York Medical Journal. After a general consideration of the disease and its therapeutics he describes a new measure which is worthy of trial. Dr. Kilmer writes:

For the past six months I have used with marked success, the simple, yet new application of an old principle, to the description of which I ask your attention for a few moments. A stockinette band is placed upon a baby with whooping cough, in the same manner as is done by orthopedists before applying the plaster Paris jacket. This band extends from the axilla to the pubes and fits the baby snugly. Two shoulder straps are used to prevent the band from slipping down. Upon this stockinette band a single width of elastic bandage is sewn, extending entirely around the body and covering the abdomen. This bandage is sewn on when very slightly on the stretch. This elastic abdominal belt is used to control the obstinate vomiting seen especially in nurslings, where the infant in some cases would die without its use, on account of the inanition caused by the incessant vomiting. This is a very simple measure, as the old sea-sickness belt is well known, but its application to the vomiting of whooping cough is, I think, entirely a new feature, and one which I have failed to find mentioned in my perusal of the literature of pertussis. The most aggravated cases of vomiting in nurslings have been seen to stop immediately upon the application of the elastic abdominal belt. Should the vomiting continue after the belt has been applied, tighten the belt slightly, and in most cases the vomiting will cease. This form of treatment will not, of course, stop every case of vomiting, but its good effects have been manifest in so many cases that its mention in connection with this grave symptom of whooping cough has seemed to me justifiable. Not only does this infant belt prove of advantage in the control of vomiting, but it is also of marked advantage when applied around the chest, in aborting the paroxysmal stage; when wearing it, the paroxysms will be noticeably of a milder nature. The only disadvantage of this method is, that in some cases it causes a slight eczema of the underlying skin, but it seems to me that its advantages so far counterbalance this slight disadvantage as to render it really of no consequence whatever; this eczema clears up immediately when the belt is removed.

In closing Dr. Kilmer draws the following conclusions:

(1.) Whooping cough is a self-limited disease and runs its course in the same way as does a pneumonia.

(2.) The medicinal treatment which has proved the most efficacious in my hands, is that devised by Dr. Kerly, namely, the alternate use ef antipyrine with bromide and quinine.

(3.) The application of an elastic belt to the abdomen or thorax, or both, as occasion requires, combined with the above mentioned medicinal treatment, has proved itself to be, in the experience of the writer, the best and most effective method in the treatment of whooping cough.

Radium.—The scientific world of late has been greatly interested in the announcements of the wonderful properties of the newly discovered substance, radium, so well described by Dr. H. Speier in the April Recorder. Various newspaper reports now indicate that radium rays will cure cancer. The following is a summary of a report recently cabled to the newspapers: The scientific world is greatly interested in the announcement that a tenth part of a grain of radium in a glass tube the size of a toothpick, when introduced into a cancer will kill the cancer in four exposures of an hour each. A similar infinitesimal grain of radium, it is declared, will illuminate a room for a century, and an ounce of radium would drive all the horse-power motors around the world Dr. Mackenzie Davidson, the noted surgeon of Charing Cross Hospital, announced that he had successfully cured a case of superficial cancer by means of radium, and that he is treating two other cases with promise of success. Dr. Davidson stated that radium proved successful and effective with superficial cancer, but cannot say it will cure internal cancers, as he has not experimented with them yet and does not want to raise false hopes. The case Dr. Davidson cured was rodent cancer of the nose after unsuccessful treatment by X-rays. The cancer was exposed to radium during four exposures of an hour each, given at intervals of a few days. In three weeks the diseased part was healing satisfactorily and in six weeks, with two more exposures, the cancerous growth had disappeared, leaving no scar.

A later cable to the Inter-Ocean presents the following interesting report: Every week adds something to the sum of knowledge which is being steadily accumulated by investigators into the properties of radium and helium. Sir William and Lady Huggins, prompted by theoretical ideas, have attacked the problem of the spectroscopic analysis of the light emitted directly by a radium salt at ordinary temperatures, and the results of their work have now been received by the royal society. From a preliminary visual observation it seemed that there were traces of bright lines in a continuous spectrum. Preparations were therefore made for a photographic record by means of a quartz spectroscope. Finally a spectrum consisting of eight definite bright lines in the ultra-violet, entirely different from the spark spectrum of radium, and some faint lines, together with a very faint continuous spectrum, were obtained by seventy-two hours' exposure. On comparison, this spectrum was found to be so different from the ordinary phosphorescent spectrum, with recorded measurements for helium, that it appeared at once that four, or perhaps five, of the eight lines agreed with the lines of helium. Sir William Ramsay, F. R. S., and others also found distinct evidence of the presence of helium in the spectra of gases emanating from radium bromide. The present observations, therefore, indicate that radium shines largely by the light of the rare gas helium which it evolves.

In this formation of the element of heltum from the totally distinct element of radium the imaginative may see a partial realization of the alchemist's dream. If the production of one element can be traced down, why not that of gold and silver. Professor Rutherford, it may be remembered, has already put forward a fascinating speculation that the radiance thrown off by radio-active metals is a object lesson on a small scale of the birth of the elements, seeing in the gradual breakdown of the radium atom into simpler forms the reverse process of the manufacture of the elements.

CLINICAL SOCIETY PAPERS

The Transmissibility of Tuberculosis, By Drs. Roos and Packard.
Paralysis of the Left Vocal Cord, By Dr. D. S. Dougherty.
Gummatous Tumor, By Dr. D. A. Sinclair.
Septic Uterus, By Dr. Luckett.

CLINICAL SOCIETY OF THE NEW YORK POLYCLINIC MEDICAL SCHOOL AND HOSPITAL.

Regular meeting, with the president, Dr. Alexander Lyle, in the chair.

The paper of the evening, by Drs. Roos and Packard, entitled

THE TRANSMISSIBILITY OF TUBERCULOSIS,

was read by the latter. He said, in part:

Statistics show that one-seventh of the deaths during a given year are due to tuberculosis. It is conservatively estimated that 150,000 persons die from some form of the disease in the United States annually.

Many authorities claim that it is non-transmissible, but the predisposition is always present in a child born of tuberculous parents. Statistics and animal experience to the contrary, it can be proved conclusively that hereditary transmissibility is not only a possibility, but a reality. Cohnheim was the first to suggest the possibility of direct transmission to the embryo. In substantiation of his theory, the following case was referred to: A tuberculous mother, twenty-three years of age, died in the seventh month of her first pregnancy. Directly after death the fetus was extracted by Cesarean section. Examination of the blood from the umbilical vein, as well as of the liver, spleen and kidneys of the child, demonstrated positively the presence of tubercular deposits and of tubercle bacilli.

Lehman's case was that of tuberculosis of the placenta of a twenty-six-year-old mother, who died of general tuberculosis Sections of the chorion showed typical miliary tubercles, and microscopical examination disclosed the presence of the bacilli. Many other cases are on record. In the experimental work of Bar and Renon they have been able to infect guinea pigs with tuberculosis with blood taken from the umbilical vein of a fetus whose mother had been phthisical. Monti, in his lectures, was wont to say that a fetus is always prone to tuberculous infection, but that if the placenta is healthy, it usually, but with many exceptions, acts as a filter to the micro-organisms and the child escapes.

Distinguished authorities at the present time assert that direct transmission through the sperm is a very remote possibility. Among these is Virchow, who claims that germinatic infection is impossible, as the presence of the bacillus must necessarily interfere with the development of the ovum. On the other hand, in Monti's work on spermatic infection, he found that the semen of tuberculous patients, when injected into the peritoneal cavity of guinea pigs, produced a general tuberculosis. Baumgarten and Spano have demonstrated that the seminiferous fluid of tubercular subjects whose genital organs was entirely free from pathological lesions, contained numberless tubercle bacilli.

The time will come when the teaching regarding the transmissibility of tuberculosis will undergo a radical change, and authorities will then point out to the public the danger, as well

as the criminality, of marriage between tuberculous individuals.

Dr. F. J. Quinlan opened the discussion which followed the reading of the paper. He said that he thought the ideas set forth were reasonable and possible. The soil is bad in tuberculosis patients and certainly the fruit that it puts forth is apt to have tissues below the normal resistance. Many offsprings from tuberculous patients are seen in the clinics, and their lymphatics are prone to disease germs, and show evidences of the ravages of disease to such an extent as to almost compel a belief in the heredity of tuberculosis. He thought that if syphilis could spring forth anew and bear new seed in offspring of parents who had acquired this disease, he did not see why tuberculosis should not act likewise. A great deal might be done to restore these children to health by clear oxygenation.

Dr. E. L. Keyes, Jr., said that his belief concerning the heredity of tuberculosis had been directly contrary to that expressed in the paper, but the cases quoted were so strongly confirmatory of direct transmission of tubercular germs from parent to offspring that he hesitated to continue his disbelief in this theory. While some of the cases were very suggestive, it was possible, nevertheless, to find one loophole of escape. The most convincing tests were upon children who were the offsprings of mothers in whom the tubercular germs were present to such an overwhelming degree that the mother died from tuberculosis during or at the expiration of her term of pregnancy. He asked whether Dr. Packard considered these cases of direct transmission of a frequency sufficient to form a matter of clinical importance. He had a vague recollection of having read of some experiments regarding the migration of bacteria in the urinary tract. The writer made a number of experiments in which he placed germs at the meatus urinarius, and several hours afterward killed the animals and examined the kidneys, the testicles and various parts of the urinary apparatus. He kept several animals for control. He found that even tubercular bacilli could be found to have traveled up to the kidneys and up the spermatic cord into the testicles, in every way going against the stream, as it were, and yet no actual tubercular inflammation occurred. The urinary tract is regarded as the most aseptic part of the body, but he thought that it is fairly full of germs, and fancied that tubercular bacilli were often carried through the kidneys without doing any harm.

Dr. W. B. Pritchard said that the attitude of the insurance companies, both here and abroad, regarding tuberculosis is of interest. Without one exception all applicants who give a tubercular history on either side are barred for a certain length of time, if not altogether, and when accepted have to pay heavier premiums than are ordinarily asked. This seems to point to the conclusion that they accept the doctrine of hereditary tuberculosis.

Dr. Packard closed the discussion by saying that the number of children of one, two and three months of age that have tuberculosis is almost conclusive proof that hereditary tuberculosis is more common than one would think. When it is considered that it is not necessary to have a tubercular genito-urinary tract in order to have tubercle bacilli in the semen, one can easily understand with little difficulty how an impregnated ovum may be tubercular. In answer to Dr. Luckett, he stated that several cases have been reported in literature which have been similar to that of Dr. Mandelbaum, of a tubercle bacillus imbedded in the head of a spermatozoon. He also claimed that tubercle bacillus

could be cultivated from blood, as he had been able to demonstrate cultures taken from the umbilical and portal veins.

PARALYSIS OF THE LEFT VOCAL CORD.

Dr. D. S. Dougherty presented a case of paralysis of the left vocal cord, with partial paralysis of the right vocal cord. The entire larynx of the patient was congested and infiltrated, and there seemed to be no lifting of the arytenoid cartilages on the laryngeal plane. The speaker said that the patient had been operated on last November for the removal of a thyroid enlargement, and that immediately after the operation he lost his voice. It was noticed after the operation that the larynx was pushed to the left side. He returned to the hospital, and an operation was performed on the opposite side on February 10th. Twelve days later he was seized with spasms of the anterior muscles of the forearm and calves of the legs, accompanied by intense pain and hyperesthesia, and on March 26th had an epileptic form of convulsion, This was the only convulsion he had had. At the present time the patient was able only to make imperfect sounds, but once or twice his voice had been quite distinct. The speaker thought that the condition was due to severance of the recurrent laryngeal nerve, near the trachea, and slightly in front and to the left of the right vocal cord. The surgeon who had performed the operation thought the condition was probably due to a tetanoid infection.

GUMMATOUS TUMOR OF THE LEG TREATED BY INTRAMUSCULAR INJECTIONS OF SALICYLATE OF MERCURY.

Dr. D. A. Sinclair showed a patient suffering from gummatous tumor of the leg about the size of a silver dollar, situated in the lower third of the tibia. The history of the case was as follows: Widow; thirty-nine years old. No previous history of syphilis could be elicited. Tubercular history negative. Fifteen months ago the patient noticed a swelling of the right leg over the lower third of the tibia. This was treated by poulticing and it broke. Later, she was anesthetized by ether on two occasions, and the swelling opened and the bone scraped. At the end of fifteen months the patient was worse than at any time since the growth made its appearance. She complained of severe pain and exquisite tenderness, and of nocturnal pain and insomnia. In spite of the fact that no history of syphilis had been obtained, to the speaker the swelling was characteristic of gumma. On March 24th the patient received an intramuscular injection of salicylate of mercury, and a second injection of the same amount was given on April 3d. The tumor rapidly diminished and at the present time is level with the skin. The discharge is very slight and pain and tenderness have entirely disappeared.

SEPTIC UTERUS; STRICTURE OF THE INTESTINE; INFLAMMATION.

These specimens were shown by Dr. Luckett. (1) The septic uterus contained multiple abscesses. (2) An acute stricture of the intestine was interesting because of its history. The patient, a female, aged twenty-eight years, had suffered from chronic constipation, but otherwise had never been ill. Twenty-six hours before her death she was seized with acute vomiting, spasms, and all the symptoms of acute intestinal obstruction. She was removed to the hospital, but her condition was moribund and an operation was deemed impossible. She died four hours later. At the autopsy the

small intestine was removed five inches from the ileo-cecal valve and appeared carcinomatous to the naked eye. Specimens similar to this one have been sent to a pathologist and have been diagnosed as epithelioma, but two pathologists have pronounced this specimen to be simply an acute inflammatory growth with no signs of a neoplasm nor of chronic inflammation.

(3) A specimen of an appendix was presented to illustrate the almost facultative power of the omentum to carry itself from one part of the abdominal cavity to another for whatever use it is intended. If an incision is made into the abdominal cavity, even if not at the lowest end of the omentum, the border will crawl upward and try to fill the opening. This appendix was rather short and was almost on the point of perforation. It had been grasped by the omentum, and there was absolutely no adhesion to either the intestine or to the parietal peritoneum.

* * *

The M. J. Breitenbach Co., of New York, has issued a beautiful, instructive and valuable bacteriologic chart. No expense has been spared in having the chart accurate. The original sketches were in water colors by one of the leading bacteriologists in this country, being reproduced in the minutest details by the best skilled artists in lithography. There are sixty separate examinations represented, requiring the services of four skilled artists to make the original drawings from sketches. Time consumed, twelve weeks each; or labor for one man forty-eight weeks. Eighty lithographic stones were used for the drawings and proving original designs. The time of transferring and printing of all colors was sixty-one days and the chart passed through the printing press sixteen times. The set of sixty cuts is sent free to any physician on request.

THE DOCTORS' LIBRARY

This Department contains each month reviews of the latest and best books. Items of book news will keep readers informed on progress in the world of medical literaure.

INTERNATIONAL CLINICS.—A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and other topics of interest to students, and practitioners by leading members of the medical profession throughout the world; edited by A. O. J. Kelly, A. M., M. D. Philadelphia, U. S. A., with the collaboration of Wm. Osler, M. D., Baltimore; John H. Musser, M. D., Philadelphia; Jas. Stewart, M. D.; Montreal; John B. Murphy, M. D., Chicago; Thomas M. Rotch, M. D., Boston; John G. Clark, M. D., Philadelphia; Jas. J. Walsh, M. D., New York; J. W. Ballantyne, M. D., Edinburgh; John Harold, M. D., London; Edmund Landolt, M. D., Paris; Richard Kretz, M. D., Vienna, with regular correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels, and Carlsbad. Volume 1, Thirteenth Series, 1903. J. B. Lippincott Company, Philadelphia.

The popularity of this work increases each year, and this years' sales will be the largest yet. A leading article in this number is by Dr. Wm. Osler, on Aneurism, occupying 40 pages, illustrated with half tones and a colored plate. In regard to treatment he advises thorough blood-letting to relieve the pain, distress in breathing and the cough, and rest. He says: "While we are bleeding more often, we are not bleeding free enough. * * * *

Complete rest lowers the heart rate from twenty to thirty per cent., and if we take a heart rate at seventy per minute or one hnndred thousand in the twenty-four hours, lowering only ten or fifteen beats in the minute saves many thousands of strong throbs in the sac. Absolute rest lowers, too, the blood pressure, but this is effected much more surely by reduction to the minimum of the amount of food and drink. Rest and low diet also favor coagulation. Of medicines the iodid of potassium is most helpful. The drug need not be be given in very large doses; we get all the effects from ten to fifteen grains three times a day." The writer is very conservative in regard to surgical interference. Some of the other contributors to the volume are Drs. T. E. Satterwaite, Max Einhorn, W. W. Keen, N. Senn, R. W. Wilcox, Thomas H. Manley, A. F. A. King, and J. W. Ballantyne. A review of the progress of medicine for a year has been carefully prepared by Drs.' Edward W. Watson and H. W. Cattell, and is summarized in seventy-five pages. This book is illustrated with numerous plates and figures. This volume continues to carry out the original idea of this publication to be a post-graduate course at home.

GENERAL MEDICINE.—Edited by Frank Billings, M. S., M. D., Dean of Rush Medical College, and J. H. Salisbury, M. D., Professor of Medicine, Chicago Clinical School, Volume VI, Practical Medicine Series of Year Books, under the General Editorial Charge of G. P. Head, M. D. Pages 316. Illustrated. Cloth, $1.50. The Year Book Publishers, 40 Dearborn St., Chicago.

This is a timely book, as a large part of it is devoted to diseases of the summer season. A review is given of the year's progress in diseases of the stomach and intestines. Diseases of the liver and pancreas also receive considerable attention. Typhoid, malaria, yellow fever and a number of other diseases are considered. Abstracts from the year's literature and editorial notes make a very interesting and useful volume for the practical physician. The book is well worth the price asked. The set of ten year books is furnished at the low price of $7.50. These books are well bound and nicely printed.

BOOK NOTES.

The Surgical Clinic has been combined with the Alkaloidal Clinic. The August number, which is the first issue of the united magazines, is an immense medical journal containing 182 pages of reading matter.

International Clinics, Vol. 2, 13th Series, has been received too late for review notice in this number, we wish to say, however, if you want some good literature on summer diseases, order this book, as it contains a good amount of valuable matter on the subject.

Everybody's Magazine for August contains only one so-called heavy article, "Pope Leo's Successor," by F. Marion Crawford. The article is entirely justified by its importance and timeliness, in addition to which it is beautifully written and in Marion Crawford's most entertaining style. The usual excellent fiction abounds. One feature of Everybody's Magazine is its illustrations. They are carefully selected and superbly reproduced. There are six full-page drawings of "Out-Door Sports for Women," by Anna Whelan Betts, besides nearly a hundred other photographs and drawings by well-known photographers and artists.

The Wisconsin Medical Recorder.

A Monthly Journal of Medicine and Surgery, devoted to the best interests of the whole profession.

J. P. THORNE, M. D., Editor and Publisher, Janesville, Wis.

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Letters, Case Reports and **Questions** are desired for our Discussion Department.

Society news and reports and items of interest are gladly received.

Vol. 6. AUGUST, 1903. No. 8.

A GOOD LAW.

The last session of the Wisconsin legislature passed an act regulating the practice of barbering, and providing for a board of examiners. All barbers are required to have a license from this board. The examination must show that the applicant has the requisite skill of the trade and also sufficient knowledge of the common diseases of the face and skin to avoid the aggravation and spreading of disease. The board also will require barber shops to be kept in good sanitary condition. This law will be of decided benefit to the barbers and people of this state. It will result in more skilled workmen, better shops and proper hygienic, aseptic and antiseptic measures. This will mean increased business for the barbers, as their patronage will be increased. Many men now do their own barbering because they are afraid of contracting some disease from unclean barbering. Syphilis and various skin diseases are frequently spread from a barber shop. A knowledge of the diagnosis of these diseases by the barber will prevent their transmission. Every barber should understand the principles of asepsis and antisepsis and practice them. One reprehensible practice of barbers should be stopped by the state board, and that is the use of the same piece of alum to every face where they break the skin. The barber often makes little cuts in the skin, then rubs them with alum, which, perhaps, has been used on the syphilitiec, the tubercular, etc. If necessary to apply an astringent a little powdered alum should be dusted on the cut. Some barbers allay bleeding by applying a little suprarenal solution. We are glad Wisconsin has this law and wish that every state might have such a law.

The practical use of the X-ray has been confined to the medical profession but it is just being discovered that the X-ray is a valuable agent for commercial purposes. Thos. A. Edison has recently been experimenting extensively with it to determine its commercial value. While he has announced no definite results, he states that the possibilities of its commercial value are very great. In his experiments Edison injured his eyes and his assistants received severe burns, so that he has discontinued investigation.

Two Cincinnati men have recently invented the first practical application of the X-ray in the industrial arts. They have discovered a satisfactory method of tanning leather with the X-ray. The hide is soaked in a solution of chemicals for two hours, then placed on a polished steel plate, exposed to X-rays twenty minutes and is ready to be finished into patent leather, or whatever is desired. By this process the time required for tanning a hide has been reduced from four months to a few hours and the cost reduced three-fourths.

MODERN THERAPEUTICS

Brief original communications and short abstracts giving the latest in therapeutics.

NEURASTHENIA.

By F. C. Gay, M. D., 114 Macon St., Brooklyn, N. Y.

Miss M. R. B., age 35, a language teacher in one of the city high schools, had been a teacher for nine years, and had finished every school year with a nervous breakdown, spending a part of each of the long vacations in bed, resting, dieting, massaging and taking tonics in order to get back to her work in the fall. Nervous dyspepsia, sick headache, insomnia, and "that tired feeling" were her constant companions all the time year after year. This year, two months before school closed, she came to me and told me that her nervous system was giving out earlier than usual and she would not be able to finish the term unless I could brace her up with electricity. I told her she could have electricity if she wanted it, but that hypodermics of chemical lymph would do her more good, and instead of just bracing her up would effect a permaneut restoratiou of nerve force. The treatments were commenced May 9th and continued for seven of the remaining nine weeks of the school term, The first week she "held her own"; the second she commenced to feel stronger, to have a little appetite, and sleep better. After that she never knew what it was to feel tired, to have indigestion, headache or insomnia. She worked on school papers every night until midnight, did almost double duty in school, taking on work that o'hers were not able to do. She went to her home at the end of the term feeling perfectly well and instead of going to bed as she has formerly done she went away to a teachers' summer school to spend part of the vacation in extra work.

TREATMENT OF ANEMIC CONDITIONS.

By Fritz Euler-Rolle, M. D., Vienna,

(Continued from page 235, July Recorder.)

I am also able to report two cases of diseases of metabolism, namely, one of diabetes mellitus of moderate degree, and one of the uric acid diathesis. The subject of the former was a man of 46 years old, who since two and one-half years had constantly excreted a variable amount of sugar in the urine. He stated that while the amount at first was only 0.7 per cent., it had increased and finally reached 3.21 per cent. After being placed on an exclusive animal diet there was always a gradual subsidence of the glycosuria, the sugar disappearing completely from the urine after about 14 days. In the course of time, however, he acquired an unconquerable repugnance toward any form of animal food, and the supply of albumen could only be augmented by the addition of nutritive preparations to milk, of which he took about a quart daily. Gude's pepto-mangan was administered regularly in quantities up to 6 tablespoonfuls daily, chiefly to relieve the marked anemia present, which it did excellently. Inasmuch as this preparation supplies not only iron and manganese but also peptones to the organism, the patient could be maintained in a vigorous condition during six weeks.

Another patient, 58 years old, who

had suffered since four years with arthritis urica, had passed three months previously through an acute gouty attack, which yielded to iodide of potassium, the former attacks having been relieved by the salicylates. The diet, which had always been somewhat abundant, was thoroughly regulated, and for a long time the patient took meat only at his midday meals, with the proportionate addition of green vegetables and some fruit, while his breakfast consisted of coffee with milk or thin cocoa, with two tablespoonfuls of pepto-mangan, and a roll, and his supper of butter, eggs, etc., and two tablespoonfuls of pepto-mangan. No recurrence of the acute gouty attack has taken place after a lapse of five months, and subjectively also the patient feels well under this regimen.

Another observation relates to a peasant girl, 24 years old, with leukemia. Examination of the blood showed that the number of erythrocytes had fallen to 1,600,000 to the cubic millimetre, while the number of leucocytes amounted to almost 90,000; poikilocytosis was also present. Among fhe leucocytes there were found about 6 per cent. of eosinophile cells and numerous lymphocites. The percentage of hemoglobin according to Fleischl's method was about 20 per cent. The spleen was much enlarged, its lower margin being palpable three fingers' width below the navel. Besides the medicinal treatment with quinine and arsenic, pepto-mangan (Gude), at first three tablespoonfuls, later six tablespoonfuls, was added to the milk. The patient also received a mixed diet. At the end of two months she had gained 2¼ kilos in weight. If we consider that in severe leukemias the excretion of nitrogen is always increased, and that this patient before the administration of the iron preparation, in spite of an abundance of nourishment, constantly lost in weight, as shown by observations made every five days, we are forced to the conclusion that the improvement in her nutrition must be ascribed in great part to the abundant ingestion of easily absorbable albumen and the hematogenic power of the preparation administered.

Although from the cases cited above we are able to form a decision as to the action of this remedy, it may be further added that it fulfills its purpose in the majority of instances; for, aside from a marked case of phthisis with intestinal ulcers and amyloid changes in the internal organs, in which the profuse diarrhea was increased by the administration of the iron preperation, which therefore had to soon be discontinued, and aside from a severe case of diabetes, a considerable improvement in the general health of the patient could always be demonstrated clinically by determinations of the bodily weight, by the condition of the gastro-intestinal tract, and by the microscopical examinations of the blood. The increase of the diarrhea in the above cases is attributable, in my opinion, perhaps to the too large quantity of the pepto-mangan administered. It is well known that all peptones and albumoses stimulate more or less the mucous membrane of the intestine, and therefore may give rise to frequent fluid evacuations. This is best avoided by keeping the daily and single doses within certain limits and not increasing them too rapidly. On the other hand, this property of the preparation can be utilized therapeutically, especially in cases attended with habitual and chronic constipation, particularly in the chlorotic girls, in which the iron administered enchances the existing sluggishness of the bowels, as well as in neurasthenia and similar conditions.

(To be continued.)

Chloropepsoid will cure dyspepsia. Many doctors say so.

SUMMER COMPLAINT.

The mucous membrane of the gastro-enteric tract rids itself of the inciting materal of summer complaint with the assistance of very little internal medication, though this act is not performed without making a demand upon the general store-house of energy. Add to this the depression caused by toxaemic absorption and the marked exhaustion of an acute attack is readily explained.

Probably there is no better aid to further beneficial medication than antiphlogistine applied warm and thick over the entire abdomen. The dressing to be immediately covered with absorbent cotton and a suitable compress. Peristaltic spasm is at once reduced, intestinal comfort promoted and refreshing slumber invited. Acting reflexly, antiphlogistine restores the muscular tone of the intestinal walls and energizes the entire economy to resist the prostration from summer complaint so common to infant and adult during the humid months.

MELANCHOLIA, INSOMNIA AND GENERAL LOWERING OF NERVE POWER.

In a very forceful and exceedingly interesting paper on this subject, published in the Cincinnati Lancet-Clinic, Dr. T. D. Fink of Louisville, Ky., writes the following: "I am convinced that there is no other remedy so useful and attended with such satisfactory results in the treatment of melancholia with vasomotor disturbances, anemic headache, emotional distress, and active delusions of apprehension and distrust as antikamnia tablets. These tablets also increase the appetite and arterial tension, promote digestion, and are particularly serviceable in relieving the persistent headache which accompanies nervous asthenia. In neurasthenia, in mild hysteroid affections, in the varions neuralgias, particularly ovarian, and in the nervous tremor so often seen in confirmed drunkards, they are of peculiar service. Patients who suffer from irritable or weak heart, needing at times an analgesic, can take them without untoward after-effects, knowing that the heart is being fortified. In delirium tremens, they relieve when there is great restlessness with insomnia and general lowering of the nerve-power. The pain of locomotor ataxia yields to treatment with antikamnia tablets in a remarkable degree, their analgesic power being of a peculiar kind, in that they will relieve painful affections due to pathological conditions of the peripheral nerves, as neuritis, etc., also lumbago, sciatica and myalgia. In chronic catarrh of the stomach, with its often accompanying headaches, in cardiac dropsy and in ascites, they are of decided benefit."

TREATMENT OF ECZEMA OF THE SCALP.

Parker pleads for more patience and perseverance in the treatment of this troublesome affection. So many physicians prescribe time or pronounce the condition hopeless that parents often discredit the physician who promises recovery in a reasonable time. The first measure in successful treatment is a thorough washing and shaving of the head. Castile soap and much water of a temperature not less than 100 F. should be used. The same water should not touch the head twice and and pledgets of absorbent cotton are to be used to remove the crusts. During treatment the pillow case should be consigned to the washtub each morning, and a clean one put into its place. These are not over particular but imperative details, if favorable results are desired. Jugglery in

prescriptions cannot avail, and rigid hygienic measures, extending to all the surroundings, must accompany medical treatment. The second step is in the case of nursing infants to treat the morbid constitutional condition, generally found in the mother. The alterative, iodia, is nearly always applicable and in severe cases should be administered to both mother and child. If the irritability attending the eruption requires special treatment, bromidia should be given. Some children will require an easily assimilated iron tonic. The bowels must be kept open with a mild aperient given in the early morning. Locally boroglyceride is the best ointment. Ecthol is also a remedy of much value, being a powerful corrector of depraved conditions in fluids and tissues. It is employed diluted, according to the severity of the case, and sprinkled upon a thin cap of surgeons' cotton. The cap may be renewed, and the old one burned, daily. —Medical News.

In bovinine the life-giving elements that go to sustain and build the body retain all their nutritive integrity, ready for immediate absorption into the circulating medium through which all degenerative processes are interrupted, all repairs accomplished, all growth induced. There are no artificially prepared foods to be compared with it, since nature herself compounds it, refines and perfects it to her own needs and purposes.

We cannot reiterate it in too strong language that the blood is the sole sustainer of life. It carries, contains and contributes every atom, element and molecule of matter that goes to build, sustain and restore the human body—muscle, nerve or brain, flesh or framework. None of the artificially prepared foods, whatever their names or claims, are thus vivified, vitalized, and ready for instant assimilation.

BRIEF MENTION.

Plague prevails in Peru.

Hay fever time is here. Bioplasm adrena is a good remedy to relieve it.

Calicolo has been proven, by clinical trial, to be a valuable remedy in tuberculosis.

Keep your knives sharp. The dry hone made by E. A. Harrington, Waukesha, Wis., will do it.

Suggestion is an excellent magazine of psychology. Send to 4074 Drexel Boulevard, Chicago, for a sample copy.

Cure your hernia cases. The patients will be delighted, and you will make some money. Write the Ideal Chemical Co., St. Paul, for valuable information on the subject.

Dr. Ralcey Husted Bell has become the editor of the Medical Mirror. He is a well known literary man and well qualified to succeed the lamented Dr. I. N. Love as editor of the Mirror.

Triacol is very necessary to the successful treatment of respiratory diseases. Send for a free sample and give it a trial. Address the Alpers Chemical Co., 4 and 6 White St., New York.

One of the marked advantages which Daniel's conc. tr. passiflora in-

carnata possesses over other sedatives is that it exerts no deleterious action on the heart. This is desirous in treating nerve diseases.

Rockefeller recently offered Rush Medical College, Chicago, $6,000,000, provided the school raised $1,000,000. The Rush faculty has raised the required amount, so the prospects are that Rush will be the wealthiest medical college in the country.

Aletris cordial, Rio, indicated as a prophylactic remedy againts post-partum hemorrhage, uterine weakness, great developement of the fetus and of the adnexa, and in those cases in those cases in which there is a disposition to hemorrhages.

Thomas R. Dawley, Jr., states, in Success, that the world's crop of coffee for the year ending June 30, 1903, is sixteen million bags. Over eight million bags were sold in the United States, making an average of twelve pounds for each inhabitant of this country.

The Household-Ledger for August presents a variety of interesting reading. "Celebrities of To-Day," by Fannie M. Lothrop, are excellent biographical sketches, with portraits, "Yachting," by Arthur S. Hoffman, with pictures of famous yachts of the day, is timely. Fiction, music and the household departments make a good issue.

McClure's Magazine is always good. A leading feature, and a strong one, of the August number is Lincoln Steffins' biographical sketch of Jacob Riis. An interesting illustrated article is "A Side Light on the Sioux", by Doane Robinson. The bulk of this number is devoted to good summer fiction. "The Method of Charles Stuart York" is a charming short story by May Kelsey Champion, with colored illustrations.

At this season when intestinal troubles are so prevalent accompanied by the usual manifestation, abdominal cramps, etc., nothing seems to relieve the distressing condition so promptly as Hayden's viburnum compound, a true and safe anti-spasmodic. Give two tablespoons of "H. V. C." in six of hot water every twenty minutes until relief is afforded. Be sure the genuine "H, V. C." only is administered.

The August Lippincott's is devoted to summer fiction. The complete novel is "The Green Dragon" by Elizabeth Duer. There are seven good short stories by Marion Harland, Churchill Williams, Wm. Le Queux, Ella Middleton Tybout, Edward Boltwood, Clinton Dangerfield and E. Spence De Pue. "Father Kneipp and his Cure" is an interesting article by Maud Howe. The "Walnuts and Wine" is as sparkling as ever.

Among the striking features in the August "Success" is an article on the horror of caste, written by Frank Favant. Walter Wellesley tells of the boyhood days of John B. Herreshoff, the designer of the racing yacht, Reliance," and Hamilton Wright Mabie writes entertainingly about using one's leisure. Among the many other features are, "Vacation as an investment," by Orison Sweet Marden, a fine new poem, by Edwin Markham, entitled, "The Immortality of Song," a character sketch of Joseph G, Cannon, the prospective speaker of the House of Representatives. This issue of "Success" is particularly strong in fiction.

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A Monthly Journal of Medicine and Surgery, Devoted to the Best Interests of the Whole Profession.

VOL. VI. JANESVILLE, WISCONSIN, SEPTEMBER, 1903. No. 9.

LEADING ORIGINAL ARTICLES.

PRACTICAL ELECTIVE SURGERY FOR THE GENERAL PRACTITIONER.

By Charles C. Miller, M. D., 100 State Street, Chicago, Ill.

Continued from page 244, August Recorder.

PREPARATION OF THE HANDS.

The rendering of the hands surgically clean is difficult under all circumstances. This must always be remembered by the physician and surgeon. No technic has been developed which can be relied upon to secure a surgically clean hand, without the expense of considerable care, effort and time. The use of antiseptics must ever be secondary to the mechanical removal of extraneous material. Soap, brush and clean water can be relied upon to render the hands safe, if sufficient time and care be taken, and the hands be in a fair condition. This cannot be said of the use of antiseptics, unless an effort at the mechanical removal of the foreign materials present, be attempted at the same time.

Scrubbing the hands for fifteen to twenty-five minutes with green soap and a brush which has been boiled, followed by five minutes scrubbing with a one to two thousand bichlorid, using a sterile brush, will render the hands fit for the entrance to the rubber gloves. The gloves can then be scrubbed over with the bichlorid solution after they are upon the hands. It is always well to wash off the bichlorid solution with clean water before putting on the gloves.

ANESTHESIA.

VOLATILE SPRAYS.

The benumbing effects of freezing can be taken advantage of for the simplest operations. The volatile sprays are the best for this purpose. The effect is very superficial and much of their action is due to the mental effect upon the patient.

COCAINE.

Cocaine will decidedly obtund sensibility if properly used. The drug has a toxic effect in doses greater than one grain and as quite a few people are decidedly susceptible to its effect great care must always be taken in using the strong solutions. Mere contact of a solution to an uninflammed mucous surface will produce its anesthetic effect.

To secure its effect upon the unbroken skin it must be injected subcutaneously. This can be accomplished with an ordinary hypodermic. Most operators use two per cent. solutions deposited along the line of the proposed incision. It is important that the needle traverse the deeper layers of the skin rather than the subcutaneous cellular tissues, if a maximum effect is desired.

A dram of the two-per-cent solution will contain a little over a grain of the drug. No more than this should be used unless we can prevent the absorbtion of the drug.

Wherever possible, the circulation of the part should be interfered with, so as to limit or prevent the absorption of the drug. This can be done in the limbs by use of an elastic ligature above the site of the operation.

INFILTRATION ANESTHESIA.

This has proven to be a means of obtunding the sense of pain, which is of great value for operations of considerable importance as well as minor ones The feature of the process consists of an extreme distention of the tissues with a weak solution of cocaine.

When first introduced several other agents were used in the solutions, but while they greatly complicate the preparation of the solution, they are of very little, if of any value.

A grain of cocaine to an ounce of plain boiled water will make a perfectly satisfactory infiltrating fluid.

The solution is first to be injected along the deeper layers of the skin. Now the needle is to pursue a parallel course somewhat deeper. As the needle traverses the tissues the cocaine is injected in front of its point preventing pain. The parts become pallid and when the procedure is properly carried out absolute freedom from pain may be assured. I have opened the thick muscular abdomen with this form of analgesia.

SUBARACHNOIDEAN INJECTIONS.

The injection of cocaine solution into subarachnoidean space will not be found satisfactory in general practice outside the hospital. I have used the method in two operations in two private houses and had the patients worried with pain and fear, chiefly the latter, and with excited friends and relatives in hearing distance; this is anythiug but pleasant. In hospital practice the method is of value in selected cases.

CHLOROFORM AND ETHER.

The operator begining his career should be a friend to general anesthetics. Wherever possible he should do his work with his patient under an anesthetic. He is not worried by the fears or pains of patient, and if a little excited can work slow until his alarm subsides.

Ether should always be given the preference by the general practitioner. His anesthetists will not have had a too extensive experience as a rule. The liability of having an accident will be a source of fear to the operator. With ether, accidents occur after more of a warning than one gets where chloroform is used, the chloroform sleep being very quiet and the accidents occurring very quickly. The operator when ether is used will find that he will notice the change in color and in the breathing of the patient before serious mischief has resulted. Owing to this ether should be given the preference, when not contra-indicated.

Chloroform is best given with the Esmarch inhaler. This instrument should be covered with only sufficient gauze or cloth to catch the drops of the anesthetic, and prevent them falling upon the face of the patient. The region about the nose and mouth should be anointed to prevent irritation or blistering by the drug. Where only enough gauze covers the inhaler to catch the chloroform, it is quickly

volatilized and inhaled during the two following inspirations. Practically all the agent being thus taken in so soon after it is poured upon the inhaler, we are better able to judge how much the patient is inhaling at any time.

At the start only a few drops must be allowed to fall upon the inhaler. If the patient is nervous it is well to hold the inhaler above the face for a moment. A few drops are added after the lapse of a few seconds. This is continued, gradually increasing the amount as we proceed. The chloroform has no unpleasant effect at first, and the patient makes no objection, as a rule, until its influence commences to be felt.

As the anesthetic is increased the patient passes through various stages which precede anesthesia.

If struggling occurs the patient is to be firmly held and the anesthetic continued, unless during the struggling the patient should suddenly hold his breath. In such case none of the anesthetic should be poured upon the mask until breathing is again commenced. This is due to the fact that if we continue to drop the chloroform upon the mask, it is quickly vaporized and the patient upon inspiring may draw in a very concentrated vapor of the drug. To neglect of this point can be traced many of the accidents of anesthesia.

As soon as the patient gives way under the anesthetic and relaxes, so that the muscles are flaccid and reflexes absent, (this latter can be tested by touching the conjunctiva, and noting if any contraction of the lids occurs) the patient is ready for the operation, and the amount of the chloroform should be somewhat diminished.

All patients vary as to the amount of chloroform required to maintain anesthesia. The anesthetist must judge according to the amount required to render the patient insensible.

If the anesthetist is of limited experience, tie the patient upon the table so that the struggling will not cause too much inconvenience and tell the anesthetist to be cautious. Such a course will be the safest. With a man of little experience if he is careful, we can operate with safety.

If the man is reckless, even though he has had ample experience, I would rather dispense with his services for one with caution and a limited experience.

As the patient goes under an anesthetic the pulse and respiration should be carefully watched.

The pupil cannot be relied upon and until a man's experience ripens he had best not trust it to guide him. It varies and the variations will be misinterpreted. The pulse and respiration, together with judging the amount of the anesthetic to use, will keep the beginner occupied.

As soon as the patient is under the influence of the chloroform, it will be best in most cases to at once change to the use of ether. This agent will prove very much safer in the hands of the general practitioner, and should be given decided preference. It will be used with a form of inhaler, which permits of the free ingress of air with the vapor. The special inhalers, which limit the supply of air, are useful if one wishes to estimate the saving of ether, as worthy of consideration, but otherwise they are inferior to the method, which permits of an intermingling of air without exactly regulating such.

In the absence of a special inhaler, a folded towel can be used as a cone, or a newspaper into which has been placed a yard or two of gauze shaken into a mass to receive the ether, will prove satisfactory.

ANESTHETIC ACCIDENTS.

Where pulse or respiration discontinue during the administration of either chloroform or ether, the anesthetic agent is to be at once withdrawn.

The patient is to be inverted. The table should be so arranged for this previously. If it be a plain table a convenient chair can be placed under the legs at the feet of the patient.

The jaw is to be pushed forward, the tongue caught and drawn from the mouth, and any mucous in the pharynx mopped out.

All this is to be done very quickly and artificial respiration commenced without delay. The Sylvester method is probably the best.

The arms are to be caught at the elbows and then pressed firmly against the chest. Then they are to be carried upward and outward until above and behind the head. They are to be brought together parallel, a momentary pause should occur, and then they be brought down alongside the chest. When alongside of the chest the firm pressure upon the chest wall is to be repeated, and after a slight pause the process repeated. This is to be kept up regularly, as in breathing.

Care should be taken not to merely pump the arms up and down, and not to so forcibly compress the ribs as to endanger their integrity.

Precaution in anesthesia to prevent accidents will be more satisfactory than treating such. Artificial respiration and the inverting of the patient will be more valuable than other measures.

The patient will have very little circulation, so one can see that an injection subcutaneously will be slowly absorbed, and not likely to have a decided effect. No time should be lost from artificial respiration to give such.

If plenty of assistants are at hand we can use nitro-glycerine, atropine, strychnine, digitalis or some other agent. The injection of such agents will be of little more value than the efforts to stimulate respiration or heart action reflexly. We hear about the use of a wet towel to slap the epigastrium or of divulsion of the sphincter, and similar measures. Their value will not appeal to one, when we consider that reflexes from these points were lost long before the patient reached a condition of actual danger.

If these forms of reflex stimulation rouse the patient it is because he was out of actual danger.

The operator had better have a simple routine plainly fixed in his mind for managing these cases, and learn to carry it out effectually.

Avoid hurry, flurry and noise in these accident cases; quiet, calm, prompt action will attain the best results.

INDICATIONS AND CONTRA-INDICATIONS FOR ETHER AND CHLOROFORM.

The stomach should be empty if possible before giving either ether or chloroform.

No foreign bodies should be left in the mouth, such as false teeth, tobacco, gum, etc.

The condition of the heart should be noted. The mere presence of a murmur does not contra-indicate the use of either ether or chloroform.

Ether is preferred in the patient with a heart lesion, particularly if there be broken compensation.

Renal disease in the absence of a heart lesion will be an indication for chloroform; some claim the reverse.

The pipe stem radial will be an indication for chloroform, the increase of the blood pressure with ether endangering the diseased vessels.

Bronchial or pulmonary affections will call for the use of chloroform.

THE CARE OF THE PATIENT FOLLOWING OPERATION.

If the patient when put to bed be profoundly under the influence of the anesthetic, he may sleep for several hours. In others, as they recover they make considerable outcry. In the

private home this causes a great deal of concern. The operator will find that he can avoid or check this safely by the use of a hypodermic injection of $\frac{1}{4}$ grain morphine and $\frac{1}{100}$ grain atropine.

If the operation be such as likely to be followed by pain, the injection can be used and repeated once or even twice during the next six hours subsequent to the operation.

VOMITING.

Vomiting is best treated by absolute quiet and keeping of everything out of the stomach.

If the patient be very thirsty a few ounces of water can be injected into the lower bowel. After a lapse of two or three hours hot water can be tried by the mouth. Tablespoonful doses, increased as the patient improves, will be the best course. Sucking ice is usually not a very good way to treat these cases. The ice is better swallowed in small particles. After a number of hours, if vomiting continue a weak cocaine solution, containing in all not over a half grain may be used.

SHOCK.

This will seldom follow elective operations. It is to be treated by stimulation, external heat and saline infusions, especially, when considerable blood has been lost during the operation. The heat is best applied with hot water bottles; but the greatest care is to be taken to prevent burning of an unconscious patient.

SALINE INFUSION.

This is best given into the cellular tissue, as it will be taken up promptly, and will not overburden a weakened heart, as is possible by too rapid intravenous injection. Use of the suprarenal extract is being recommended in such injections for its effect in raising blood pressure in these cases.

(To be continued.)

A WATERPROOF ABSORBENT DRESSING FOR EMPYEMA AND OTHER DISCHARGING CAVITIES.

By Sinclair Tousley, A. M., M. D., 103 West 76th St., New York.

Professor of Surgery and Rectal Surgery, N. Y. School of Clinical Medicine; Surgeon to St. Bartholomew's Clinic.

When the discharge from empyema, artificial anus, psoas abscess and the like is very profuse it will often soak right through the dressing, or if there is an ordinary waterproof covering over it the discharge soaks downward through the dressing and escapes from under the waterproof covering at its most dependent part. In either case we have the patient's clothes saturated at some point and in a condition at once disagreeable and unsanitary.

My dressing consists of the usual absorbent pad of gauze and cotton of a size corresponding with the region of the body and the amount of discharge. This is laid upon a sheet of oil silk or rubber tissue large enough to project three inches beyond the absorbent pad in every direction. The edges of the protective are folded over the pad and secured by a stitch or two at each corner of the central square where the pad is uncovered by the protective; the whole dressing is applied with a bandage which ought to fit quite closely. The idea is that the moisture soaking through the dressing down to its most dependent part is caught in a cul-de-sac by the folded edge of the oil silk; and in practice I have observed over and over again that the discharge is entirely retained in the dressing and that the latter is much more uniformly saturated with the discharge than is the case where other methods are used. There is never any little well of unabsorbed discharge seeking a means of escape from under the protective.

As to the possible objection that the discharge is retained in contact with the wound and acts as a kind of a poultice, the answer is that in the cases for which this dressing is intended the discharge is so profuse that with ordinary means the wound as well as everything else about the patient is constantly soaked with it. In the vast majority of cases this does no harm and in the few cases where it is necessary to change the dressing as soon as the part in contact with the wound becomes moistened by the discharge, the very fact of frequent change of dressing will render unnecessary any special protective like mine.

With this dressing the protective may be cleaned and used over again.

The author does not wish to be understood as claiming any special originality for the dressing.

PHYSIOLOGY AND PSYCHOLOGY.

By Herman Gasser, M. D., Platteville, Wis.

(Continued from page 171, June Recorder.)

WHAT IS NERVOUS ENERGY?

That nervous energy is a form of physical force is not doubted, although all may question whether it circulates in the nervous system with that physiological and anatomical continuity we observe in the circulation of the blood. On further thought, however, it appears to me it is not so much the idea of the circulation of the nervous energy in an endless and continuous system that it is difficult to grasp, but how does it, in the circuit of its function give rise to all the varied states of feeling, ideas, loves and hates, pleasures and pains with all their variations of expression in health and disease. What relation can there be between them? For surely an idea, or state of feeling, a pleasure or a pain has nothing in common with the physical power we call nervous energy, and yet we must admit that the physical energy which causes our pleasure or pain is an interdependent and related part of the unity of system between them but appear to us as special and distinct entities.

This is our established and organized habit of observing and studying this problem. In no way have we ever been able to scientifically show a connected and systematic relation of an idea of feeling with nervous energy, and is the real fact in our problem which causes the great difficulty for its comprehension and understanding.

I have dwelt upon this point again and again at different times; indeed, it is the central idea around which the entire study of my life has been concentrated because of its importance. It is the gate through which we must pass to enter this new field of thought and study that reveals so many obscure problems, brings scientific accuracy where before we were lost in the confusion and wilderness chaos and doubt.

Life is an organized and continuous physical activity of function created or evolved out of the forces of nature, the laws of which are interdependent and related. This is the accepted conclusion of all sound and practical expression. All the special living functions of the body are held together in a related unity, life or equilibrium by the nervous system. This is the prime purpose of its function, is why it exists, and must be continuous because life is continuous; we cannot think of the one without the other.

This simple conclusion ought to be a biological and physiological common place, fundamental truth long before this. Every hour of our daily experience in common with the vast fund of the world of facts is a constant demonstration of its reality. How or why all mankind has reasoned itself

away from it is one of the great psychological curiosities, the analysis of which we cannot go into here. We were looking among the stars for that which is at our feet.

How can or does the continued functional energy that gives rise to the unity of life with all its varied and special activities as it is interpreted in the systematized unity of our states of feeling with all its variations, arise otherwise than through the nervous system. The nervous system consists of the brain, spinal cord and nerves sent out into every part of the body, the function of which is to carry the local living physiological reactions centrally by the ingoing or sensory nerves, there to be adjusted into a related unity of function by sending out its elaborated energy in due proportion in the form of motion or volition by the motor nerves. This is the circuit of the function of nervous energy, the sensory and motor side of which is anatomically connected, centrally or in the brain and cord, and peripherally or in the body generally by nerve plexuses in exactly the same way as the capillaries connect the arteries and veins, and is purely a continuous but living physical phenomenon.

In this circuit of nervous function, however, our feelings mind and ideas so far have not received any attention, much less an explanation. How are we to account for them? How do they come into being? That somehow they are intimately, directly and lawfully related we know. The experience or feeling within and its reality without are two sides of the same unity, but appear as special entities. The idea of the house we live in and the house seem to have nothing in common. It is this that has caused our dual conception of mind and matter, and which has kept us in chronic delusion. We have never fully realized that our house or home in the related unity without, and our house or home in the related idea within, are interdependent and related parts of the same lawful system and unity, two sides of the same reality; the idea or world within, is the world without; it is our world in the world; our idea in the idea.

On first acquaintance it no doubt sounds strange to compare states of feeling with nervous energy, even the common matter and force of nature, but by greater familiarity with them, the problem does not appear so unique as we are caused to believe, for they are all blended together by the same lawful and scientific system, the terms of which become ultimately known to us in our idea, and thus the unity and system of nature, the world and life is the system of our idea of it in the idea.

The millions of special sensations carried to the brain by the sensory nerves have their special entrance into it. This immense ganglion is a seething surging mass of these nervous forces which it adjusts into the related unity or equilibrium of life, an epitome of the seething and surging forces without with the constructive unity of system. As these multitudinous sensations or activities of nervous energy come into it with all their variations of function those of greatest intensity occupy the seat of attention for the time in their adjustment, and is the measure of their related function, but as soon as they become equilibrated with the whole, sink into the general unity of related feeling and life.

The flash of lightning in the sky we know is the result of a certain commingling of forces. It is purely a blind force because it has no means of adjusting or measuring itself with any past forces, no present comparative measure. In our personal observation of it the problem is infinitely more complex; the flash of light reacts upon the retina in our eye the energy of

which is translated or changed into nervous energy which the optic nerve carries to the brain wherein this specially active stimulus at once occupies the seat of related attention, rises higher than the rest in the related unity of its equilibrium of function, diffuses its energy to which it responds, and thereby giving it an acute and active state of relation around which all the past and present experiences hover, causing all the varied and related forms of feelings and expressions we know, but as soon as it becomes adjusted with the whole, sinks into the general body of the equilibrium of feeling, which is the normal and enduring measure of the living as well as the world economy. The special phenomena of the flash of lightning is only a physical fact of the system of nature in our idea or mind.

This is a demonstration that our feelings and ideas are a related measure of the multitudinous forces or sensations of the world of phenomena carried to the brain with all their variations, the function of which is to adjust, equilibrate and measure them into a related unity, the product or consensus of which is expressed in feeling and ideal states of existence. This is why all things in nature, as well as life is a relative measure of their being. The ever present reality of the measure within, is the relation of the forces without. The unity of nature we know without, is the unity of nature within—two sides of the same reality. The brain adjusts all the forces of nature and builds them into the world of life and feeling we know. It is a finite individual world woven out of the infinite world. A world in the world. An idea in the idea. The ideal unity of the world we know within as woven into our experience is the measure of the real world without. The limitation of the one is that of the other.

(To be continued.)

A CASE OF PERSISTENT VULVAR ABSCESS.

By Ralph St. J. Perry, M. D., Farmington Minnesota.

Some seven years ago I was called upon to go to the village of H— and operate upon a case of what was supposed by the local physician to be either a hernia into the labia majora or an appendicitis. A drive of two miles brought us to the farmhouse, and just as we drove into the barn yard the patient's uncle came to the gate and called out:

"I reckon you're too late, Doc, she's just busted."

Hardly knowing what had "busted" I decided to go into the house and see what really was the matter. The broad grin on the face of the patient made me feel certain that there had been no bursted appendiceal abscess, nor any incarcerated hernia. Washing my hands an examination was made which disclosed an abscess of the right labium majorum—a bartholinitis, as it is technically called. This same examination also revealed the fact that notwithstanding the twenty-four years the patient had spent on earth her hymen was intact, a point which tended to exclude gonorrhoeal origin of the trouble. After washing out the abscess cavity, packing with gauze and giving the girl a goodly supply of hepar sulph, which is the homoeopathic synonym for calcium sulphide, I left her to complete a rapid recovery.

Two years later I received a letter from this same patient stating that she had another abscess forming and asking for more of the calcium sulphide tablets, also saying that she expected to poultice the parts and let the abscess "open itself." The medicine was sent, and along with it went a letter telling her of the foolishness of allowing an abscess to burrow around

the pelvis seeking an outlet. A day or so later I found the girl waiting in my office, having come to have me open matters up. This I did and sent her home feeling much better.

In less than a year she appeared again; another abscess in the same place. This time I made up my mind that the case had developed into a chronic bartholinitis and advised her to have the offending gland removed. To this she demurred so vehemently that the previous treatment of incision, cleansing and packing was gone through with again. From that time up to a year ago I think I have cut into that right labium half a dozen times. The cavity had been painted with iodine, carbolic acid and silver nitrate; various caustic, antiseptic and vulnery preparations had been applied, but all to no purpose. There would be fine results apparently, but in a few weeks or months the pus cavity would show up again, much to my chagrin and joy, chagrin because the labium refused to heal and stay healed, and joy because each recurrence demonstrated the correctness of my prognosis, that there would be no permanent relief until the affected parts were excised.

During all this time there had been changes going on in the affected labium and the adjacent parts. The constantly recurrent inflammations had brought about considerable hypertrophy of the labium; there had developed a leucorrhoea; attacks of cystitis were of frequent occurrence and many backaches, headaches, dragging down pains, etc., had been inaugurated. There could at any time be felt in the substance of the labium the affected gland, enlarged, indurated, encysted and chronically inflamed, presenting the feeling of a tumor of rubbery consistency and the size of a walnut. The various side issues or concommitant pathological conditions were treated as best possible when they appeared from time to time.

About eighteen months ago my patient complained again of the abscess paining her and showing evidences of another eruption. This time I insisted upon a complete excision of the troublesome gland and backed up my insistence by asserting that the marriage she had in contemplation would be a painful snare and delusion unless matters in the genital region were put in a healthy condition. She finally consented and came to my sanitarium for the operation.

The second night before the day set for the operation she was given a laxative and a copious washing out of the bowels; the night before the operation the bowel bath was repeated, but no laxative; early on the morning of the operation a final bowel washing. The field of the operation was washed, scrubbed, shaved and cleansed as is customary in all orificial work, using mercury cyanide instead of the corrosive sublimate as an antiseptic.

Upon opening up the labium the gland was found to be enlarged, inflamed, encysted and firmly bound to the adjacent tissues by much dense fibrous hyper-plastic tissue. To cut and tear away these tissues and adhesions and enucleate the gland was a simple matter, but as soon as I began the work the girl stopped breathing. Rapid forcible dilatation of the rectum started the lung action again, and after a few minutes' artificial respiration and a hypodermic of strychnia everything was O. K. The degenerate gland was rapidily eliminated, the cavity dusted with aristol, its walls approximated with fine cat gut and the outer opening closed with silkworm gut.

The man who described woman as a constipated biped was evidently an observer, and had probably been raised with a large family of girls. He certainly knew of the ills following this rectal inertia. I never operate upon a patient now but what I look into the rectum.

Nearly every time, in women, I find some pathological condition; piles, fissures, ulcers, inflamed pockets or papillae, rectal or sigmoidal catarrh, or some other apparently insignificant affair, yet sufficiently irritable to the sympathetic nerves to upset the patient's health. When I peeped into this girl's back door I found piles, inflamed pockets and papillae, and sigmoidal catarrh. This was nothing unusual to find in a woman whose pelvis had been harboring a chronic inflammation for several years; in fact such a condition was to be expected. So without more ado the pockets were clipped open and the papillae snipped off. The wide vibratory dilatation of the parts was expected to do the piles more good than medicines and the sigmoidal catarrh was left to be treated later on.

The result: enlargement of the labium has entirely disappeared; piles ditto; rectum restored to its tone and now goes through its paces daily, cystitis, leucorrhoea, headaches, backaches and other assorted aches are all things of the past. The patient says she feels better than she has for years past, she now believes life worth living and has become a regular patron of a "beauty specialist" getting ready for the wedding ceremony and the bliss to come.

To the maiden of the village of H—"Here's hoch!"

FOREIGN BODY IN TRACHEA.

Henry F. Langhorst, M. D., Elmhurst, Ill.

I wish to report a case of foreign body in the trachea of a little boy, on whom a tracheotomy was done:

Edwin H., aged two years, while playing with corn was suddenly seized with a severe paroxysm of coughing and dyspnoea. His mother ran to him and, putting her finger in his mouth, scraped out three or four kernels of corn and some small pieces he had masticated. The severe paroxysm lasted a few minutes and was attended with stoppage of respiration and cyanosis (this was probably caused by reflex inhibition of the vagi through the superior laryngeal nerves, while the foreign body was in the larynx). After the paroxysm, a croupy cough and stridor was noticed. He was given emetics without result. The accident happened at 3 p. m. He coughed quite a bit during the night and was restless.

I was called the following morning and on superficial examination the child appeared to have croup. There was a stenotic cough and marked stridor present. One could hear the ball-valve like action of the foreign body as it alternately occluded the lumen of the glottis and a bronchus operative procedure advised.

The child was seen by Dr. Otto Freer, who advised a tracheotomy, and the same was performed by him at the Presbyterian Hospital at 3 p. m.

Operation.—Under chloroform anesthesia an incision about one and one-half inches long was made directly in the median line, beginning at the pomum adami and extending almost to the sternum. After this the knife was sparsely used and blunt dissection relied on. The superficial fascia was divided and then the sternothyroid and sternohyoid muscles were separated. There was troublesome venous hemorrhage which required ligatures. The thyroid isthmus was next encountered and was retracted, but as it limited the operative field, it was doubly ligated, cut between the ligatures and its ends retracted. This gave free working space. The deep fascia was next divided and the trachea exposed. After complete hemostasis, the trachea was incised and immediately thereupon a fit of coughing im-

pacted a kernel of corn in the tracheal wound, which was quickly seized and withdrawn. Touching the mucous membrane, to further stimulate coughing, caused a reflex stoppage of respiration, which, however, was of a transient nature. Two catgut ligatures were placed in the trachea and the wound closed without drainage.

The kernel of corn had swollen and was quite large and probably would have germinated in a short time.

The wound became infected and the superficial sutures were removed and the wound opened, flushed and drained. It discharged considerable but healed nicely under the influence of alkaline flushing and peroxide of hydrogen.

PHYSICS OF THE X-RAY.

By Dr. Gordon G. Burdick, Chicago, Illinois.

Chief Surgeon Peoples' Hospital; Professor Radio-Therapy and Photo-Chemistry, Illinois School Electro-Therapeutics; Associate Professor Surgery, Post Graduate Medical School; President Chicago Electro-Medical Society.

(Continued from page 248, Aug. Recorder.)

GLASS.

An important part of a successful X-ray tube that is overlooked by many makers, is the glass used in the construction of the globe.

American makers have persisted in using a lead glass with the notable exception of Queen & Co. It is marvelous the absorption that will take place with a minute quantity of such a heavy metal as lead, when incorporated in the glass compound, rendering the tubes useless for any practical purpose.

Foreign makers use the Bohemian as more suitable for this purpose, as the elementary base of this glass is composed of aluminum which has a very light atomic weight, and absorbs very little of the energy of the ray, so for practical purposes this is the best metallic base for use in these tubes today.

The thickness of the glass has much to do with the amount of energy absorbed, and helps to explain why tubes apparently made under the same condition vary so radically in their output of X-radiance. Broken tubes measured carefully by means of a micrometer calipers, have shown a variation of one-sixteenth of an inch, and it was found by measuring the walls of the best tubes, that the thickness averages about one-sixtieth of an inch. If less than this thickness is found, the tube is very much richer in X-radiance, and such make good skiagraph tubes for the heavier portion of the body; but require the most careful handling, both in regard to jars, and drafts of air while hot, or a sudden collapse may take place. It is necessary to close the windows and shut off the electric fans while they are in use; and they should not be touched with the hands until they have thoroughly been cooled off, as collapse or puncture may ensue, a deplorable accident, as one fine skiagraph tube may not be found in one hundred other tubes, made by the same workman, of the same material, and apparently the same in every way as far as the eye of man can judge.

Considerable experiments have been carried on in the past by constructing tubes of glass having different metal bases, and atomic weight; but with the the exception of Cobalt glass, results are not very promising.

The work with a tube of this character will bear farther investigation, as the ray obtained after passing through this glass apparently has a selective action upon cases of lupus erythematosis that have resisted the influence of the ray from ordinary tubes. A world of possibilities is opened up to farther experimenting along

this line, as it is found in practice that a different radiation is obtained every time the atomic weight is varied through which the ray is forced to travel, before the energy is absorbed by the tissue. The disturbance of a stable vacuum that is caused by the presence of platinum ions thrown off in the tube, under the influence of a positive current, necessitates the addition to the tube of some method by which we can work under as near the same conditions all the time as possible, and the problem is solved by means of a contrivance called a regulator.

REGULATORS.

These contrivances are constructed in many ways, and depend upon many physical facts for the successful working in each ease.

In the R. F. universal tube, as well as the Muhller, we find a means to increase the apparent vacuum of a tube, by introducing a small platinum-iridum spiral wire, which connected to a positive current throws off platinum ions and by "catalysis" causes chemical combinations to form between the free negative corpuscles of the tube, and increases the resistance of the tube by decreasing the number of free bodies inside of it, therefore allowing the remaining number to travel at a higher rate of speed under a sustained electromotive force.

The free bodies may be exhausted in a tube upon a good coil in about five minutes time, so as to increase the resistance of the tube from one to seven inches; changing the degree of penetration from a minimum to about the greatest degree obtainable under present working conditions.

This regulator is of value only to the skiagrapher, and is rarely of any use to the radiotherapeutists, as the latter usually have to contend with the opposite condition, and require regulators that will restore to the tube corpuscles from time to time as they are removed by the combinations formed inside of the tube; and that condition has been taken care of in a very good manner in the tube mentioned by inserting into the tube an electrode containing a piece of coke, or mica, which under the iufluence of the negative current throws off corpuscles in great quantities, rapidly lowering the resistance of the tube, decreasing the penetrating power of the ray, by causing collisions to take place among the corpuscles, and rapidly destroying the vacuum if carried too far. The operator must use great care in reducing a tube, or he will overdo it and ruin a fine tube; it is always better to use a very small amount of current, and try it for one second only to prevent the destruction of the tube.

The Gunlach people seal into the tube a small pallidium wire which will absorb air and hold it among its molecules; and which may be driven into the tube by applying artificial heat to the projecting end of the wire; this regulator is usually satisfactory, but gives the best results by heating the wire while the tube is in use, so that care may be observed not to overdue the regulation, or the vacuum will be lost, an accident which always happens to the operator using the tube for the first time.

Note:—R. Friedlander has called my attention to the fact, that they have recently improved their cathode connection, so that it cannot become disconnected, as it has occasionlly in the past. The improvement is a good piece of workmanship, and should obviate the former difficulty experienced with this tube.

(To be continued.)

Use exercise rather for health than strength and beauty. You will best attain these if you leave it off before nature is fatigued.—Isocrates.

USEFUL HINTS.

By J. A. Burnett, M. D., Brawley, Arkansas.

A mixture of equal parts of olive oil and turpentine used externally is an application of unsurpassed efficacy in erysipelas.

Cantharides cerate applied to carbuncles for twelve hours will cure them and the pain will be relieved immediately after applying it.

A mixture of equal parts of the fluid extracts of hydrastis canadensis and prunus virginica flavored with essence of anise makes a pleasant and effective preparation for summer diarrhoea.

When prescribing valerian if a small amount of the essence of peppermint is added, the promptness of its action will be greatly increased, and when prescribing cimicifuga if a small amount of aconite is added its action will be quicker.

A mixture of equal parts of sublimed sulphur and potassium bitartrate given in 5 to 10 grain doses after each meal and at bed time is a good alterative and gentle laxative. It is also recommended by Da Costa as a laxative in hemorrhoids during pregnancy.

A mixture of equal parts of olive oil, turpentine and bees-wax makes a fine application for burns, scalds, cracked nipples chapped hands and lips and other sores. To prepare this preparation melt the wax and oil together, when a litlle cool; add the turpentine, and stir until cold which will keep them evenly mixed.

To make a good eye water for ordinary sore eyes, especially those which occur in the summer months, take zinc sulphate c. p. and put enough in water to make it taste very slightly astringent, and then add enough lead acetate c. p. to make it slightly milk color. This is also a good injection for gonorrhoea and ordinary skin sores on children.

Zinc oxide c. p. is a non-toxic remedy and is very valuable to dust over chaffed surfaces of fleshy people and children. Dr. C. C. Hill of Beauchamp, Arkansas, told me he cured a little girl who was very badly chaffed in the groins by the external use of this remedy after it had resisted all the old "grannies" treatment. He also stated that he had found it to be one among the best remedies for diarrhoea and dysentery, especially when combined with subnitrate bismuth and Dovers' powder. When used externally it is occasionally made into ointment, two drachms to one ounce of vaseline.

GASTRO-ENTERIC FEVER.

By F. G. Thomason, M. D., Kissimmee, Fla.

I am having quite a number of cases of gastro-enteric fever (so-called typhoid, typho-malarial, continued and walking fever), and am giving them

℞ Calomel, gr. j
Zinc sulphocarbolate, aa, gr. ij
Sodium bi-carb., gr. ss

M. Ft. capsules No. 1. Sig. Every hour for six, eight or ten hours as indicated, followed by drastic dose of sodium sulphate.

Control the high temperature with acetanilid or

℞ Specific aconite
Specific veratrum, aa, ʒj
Specific gelsemium, ʒij

M. Sig. Five to ten drops every hour as indicated by temperature. Strychnia for extreme weakness. Diet, beef tea and boiled milk sparingly.

My patients recover slowly.

Can't some enterprising man with an M. D. to his name get up a formula for a "one night fever cure" or a medicine that is a "sure pop fever fixer," and sell to us poor ignorant doctors at $1.00 per bottle or $13.50 for formula for personal use only.

Rundschau.

By H. Speier, M. D., Rochester, Minn.

TETANUS AFTER INJURY BY TOY PISTOL.

We have been accustomed to hear every year of many injuries and fatalities following our peculiar celebration of the national birthday. But this year has been a record breaker. From all parts of the union have come reports of tetanus following injuries of the hands by the cartridges of toy pistols. The mortality has been great, only here and there a case of cure of lockjaw has been reported. The writer remembers a similar fatal epidemic of tetanus passing through the country 21 or 22 years ago. Many theories were then advanced in periodical medical literature to account for the occurrence; none satisfactory. At present we have better knowledge of tetanus, the specific bacillus, its habitat and history. We are told now, that on the hands of boys—they have been practically the only victims—there is always dirt and earthy matter likely to contain tetanus bacilli which enter the wound and set up the disease. But is this a fully satisfactory explanation? It is quite true the hands of boys are seldom clean. But their hands are being hurt constantly, not only on the 4th of July, cut and bruised and scratched and punctured. Why is it that the injuries give seldom rise to tetanus? The specific bacillus would be likely to be present at such times. There really remains only one conclusion, namely, that tetanus bacilli must be present in the cartridges themselves. All cases of tetanus, of which the writer had cognizance this summer, were neglected, wadding remaining in the wound for some time. The method of the manufacture of the toy pistol cartridge ought to be strictly investigated by the authorities, or still better, the manufacture and sale of these deadly playthings entirely prohibited by law.

GROWTH OF TEMPERANCE.

What a remarkable change has been brought about in recent years in the use of alcoholics, is plainly indicated by the following figures. Among 71 men, whom the writer examined for life insurance since Jan. 1st, and of whom he has kept a record, there were 29 total abstainers, nearly 41 per cent. They were not of select classes, mostly mechanics, laborers, farmers, all in the prime of their manhood, the kind of men a lodge "deputy" will solicit for membership. This is a fine showing and it is to be hoped that it may be equaled or even bettered by the experience of other examiners.

While the real value of alochol is still under discussion, certain good observers theoretically allowing to it beneficial effects on the human economy and even classing it among foods, others just as good condemning it unqualifiedly as a poison to the system, it must be admitted that practically the use of it too readily degenerates into abuse with all the evil consequences which we physicians see more freely and fully than other men. If a large portion of the youth of the nation sets its face resolutely against the temptation, avoiding thus the chief cause of financial, physical, and moral ruin, the nation is to be congratulated.

Within our profession the attitude toward alcoholics has been modified. We do not prescribe them any more indiscriminately and in as large quan-

tities as was the custom formerly, but only in accordance with exact indications and in medicinal amounts. In the personal use of alcoholic stimulants, physicians have improved, probably in keeping with improved public sentiment. The doctor, whom it was hard to find entirely sober and of whom his admirers used to boast that he was just as good drunk as sober,—true, only the proper statement would have been, just as bad sober as drunk—is seldom heard of, left here and there as a relic of the past. The great majority of our profession are temperate men, earnest, high-minded co-workers for the advancement of humanity.

DIAGNOSIS OF KIDNEY LESIONS.

In all departments of medical thought important advances are to be noted, chiefly in the direction of better recognition of pathological conditions and their more exact diagnosis and differentiation. Diseases of the kidneys are a notable example. Finding in the urine by chemical analysis foreign ingredients, such as albumin, pus or blood, is not sufficient, the microscope must further tell us, whether degenerative changes are taking place in the kidneys, and whether the pus is tubercular or not. To determine, if the pathological secretion comes from both kidneys or only one, or from another part of the genito-urinary tract, bladder, urethra, prostate, seminal vesicles, new instruments have been introduced, which in the hands of experts prove very satisfactory.

Not a few cases of nephrectomy are recorded—more ought to be—in which fatal results have followed the mistakes or blunders of surgeons. Lacking adequate knowledge of a properly functionating organ on the other side, they have removed the wrong kidney or the only kidney. Such occurrences are guarded against now by means of catherization of the separate ureters. The procedure is not devoid of danger, for it may carry infection into a previously sound organ, or inflict traumatism on the ureteral opening, thus favoring the subsequent infection. The use of an instrument which separates the urine in the bladder is preferable. Such a one we have in the Harris segregator, an ingenious contrivance which gives trustworthy results. The cystoscope, in the form given to it by American mechanical skill, is another valuable addition to the diagnostic armamentarium. It enables the examiner to determine by direct ocular inspection the conditions which cannot be found otherwise, or establish firmly such as are left unsettled by other methods.

The gain from these exact methods comes almost entirely to the surgeon. Internal medication must affect both kidneys, unless it can be shown that certain drugs have an elective affinity for diseased organs or tissues, leaving normal and sound ones entirely alone. It is the belief of some, but is it not rather a pleasing dream?

There is a drawback to the usefulness of the new instruments, namely, that they require special skill. Unless a man is trained to their application by constant use, his findings cannot be accepted as trustworthy. The logical conclusion is that diagnosis of kidney lesions is becoming the property of the specialist. That means an inevitable drift to the surgeon. Another large territory gone from the domain of the internist! We should hail this as an advance and a blessing, if suffering humanity may be materially benefited by it. Of course, great claims are made for the success of surgical treatment of kidney diseases. But are in all truth more and better cures effected by it, than by medicinal and hygienic treatment? Surgery has it all its own way at the present day and is enlarging its sphere rapidly. Time only and prolonged observation will answer the question.

DISCUSSIONS.

This Department contains each month case reports, letters, inquiries and replies from our readers. If you have a case you would like some help with, or a question to ask, write to us and we will publish it in this Department and you will get the opinions of our medical brethren. When you have an interesting case, write a report of it and send it in and it will help some one else. We need each other's counsel so let us help each other from our experiences. Letters are desired from physicians on any subject pertaining to our profession.

COUGH IN TUBERCULOSIS.

Cough in tuberculosis is a factor which requires careful study in order to determine the cause, and even when this is known, there are so many complex relationships that it appears impossible to institute other than palliative treatment. As a consequence, myriads of cough remedies are offered, none of which aims to correct the abnormal condition. Opium and its derivatives for a long time were regarded with favor; but since it has been demonstrated that these products interfere with digestion and arrest the secretions without modifying the morbid complexus, their employment has given way to less objectionable measures.

My object in the present paper is to present a comprehensive review of the inter-relations existing, physiological and pathological, in the expectation that this symptom may be controlled without hindrance to the effects of remedies directed against the disease itself. Please note that I do not claim the cough should be arrested, but "controlled", since cough is a conservative process; hence, its complete arrest by artificial means would be subversive in the extreme. On the other hand, the cough may be controlled by appropriate physiological measures, not only without injurious effects to the patient, but with the most salutary results as regards the disease, and this study will constitute the subject matter of my thesis.

In the early stage of tuberculosis, cough is usually a prominent symptom, but it may be controlled by the employment of suitable arterial sedatives and attention to the digestive apparatus, although this symptomatic treatment produces but little effect upon the disease other than lessening its activity. The explanation of this lies in the fact that the alkalinity of the blood is notably increased at this stage, thus enabling the cells to work more vigorously in resisting invasion; that is, increased alkalinity means more oxygen is carried to the tissues, thus increasing oxidation. Arrest of the secretions by anodynes at this stage hinders elimination and works harm to the patient, not only on this account, but also, because the debris from tissue change remaining in the system promotes or favors the multiplication of bacilli. Later, comes the auto-infection from faulty cellular activity, perhaps better described as defective metabolism. Another point to be mentioned is, that with increased alkalinity of the blood we have a valuable ally in the function of leucocytosis.

Now, it is a well known fact that many cases of tuberculosis recover without treatment, estimated by conservative observers at fifty per cent., and it is also demonstrable from post mortem investigations in hospitals that two-thirds of the poor patients who die from some other disease show evidences of previous tubercular infection, the arrest of bacillary growth having been brought about through causes unknown. Nothwithstanding these clinical facts, we know that in sections of this and other countries, fatalities are yearly increasing.

When the disease has fully developed—second stage—the normal alkalinity of the blood is diminished,

there is an absence of leucocytosis, the reactions are changed and unless we can arrest the growth of bacilli and preveut coccus infection, cough is a constant source of irritation; and here lies the secret of successful treatment. I regard a test of the saliva for acidity as second in importance only to the examination of the sputum for bacilli and coccus, and I have repeatedly demonstrated the inefficiency of treatment without correction of this abnormal condition. In fairly well nourished patients, without anemia or dyspepsia, attention to this trivial matter and the employment of multitoxine will be quite sufficient to subdue the cough and arrest the disease as well, and I refer to this as a fitting climax to my researches in the domain of physiological cell medication.

In advanced stages of tuberculosis there is, in addition to the acidity and increased mucous secretion, another cause for the cough, one, too, which is generally overlooked or neglected. I have reference to muscular relaxation, not alone of the general system, but of the bronchi and air vesicles, bronchial relaxation or even dilatation being common conditions. Observing physicians will be able to note this deficiency as the after effects of hay fever in the early fall, and later in the season, as a manifestation in recovery from ordinary colds. In these latter instances it is only necessary to increase muscular tonicity by taking up the slack, when the cough disappears as if by magic. An interesting case of this character came under observation late last winter, that of a young man aet. twenty-two, whose father told me had been taking cough mixtures for several months. Appropriate treatment corrected the defect in one day, the cough subsiding.

I do not think anything need be said concerning the cough due to abscess, anemia, disorders of digestion or pleuritic adhesions, because it is axiomatic that the cause should be removed, and I will defer for a future communication the subject of "irritative" cough. JOHN AULDE, M. D.

Philadelphia, Pa.

A MEDICAL TRUST?

In the July issue of your valuable journal, among other articles, there appeared one entitled as above. It begins with a statement that the medical profession is proud of its great society, the American Medical Association, and further asserts that the association is really controlled and managed by a small coterie of men and that they are managing the association to their own personal benefit. I cannot understand why the medical profession should be proud of their association under the circumstances. Of course, most everyone who does his own thinking can come to but one conclusion—that is, that the assertion is correct. Not only do men who manage the association aim at personal benefits, but also have been the means of causing a great deal of dissatisfaction among the members belonging to the profession, so that today, instead of unity and the prevalence of good will towards one another, they really hate each other and there exists an intolerable condition. The association has been the cause of legislation that is most iniquitous and which practically proclaims to the world that a physician licensed by one state is not as good as one licensed by another, and vice versa; hence the physician from the former will be allowed to practice his profession in the latter, provided he proves by a so-called examination questions which will be propounded by three or four individuals who are styled "Board of Examiners" and who procured the office through political influence and which office gives them great privi-

leges, prestige, and yields emoluments. This in spite of the fact that the one from the former state may know a great deal more about medicine or a branch thereof than the members individually who hold the office of examiners in the state to which he wishes to remove. In short, the American Medical Association has in effect been the cause of the teachings we are imbued with to day—that a physician of one state should not be looked upon to be as good as the one residing in another. And yet the members belonging to the association meet in annual convention and shake hands, grin at each other, and partake of food in common. What kind of an association is it that declares that the license and privileges granted to one are not as good as those of another or not to be recognized everywhere?

Would any one belong to a society, not composed of physicians exclusively, which throws down similar barriers? Clearly not! But alas! There are three classes of minds among the medical profession; one, and who really constitute the majority of the physicians, are apathetic and indifferent and awake and begin to think only when forced by reason of some unforseen event; for instance, by reason of sickness, etc., wish to remove to other states; the other, who are a majority of the remaining numbers, do not do their own thinking, but do one thing or another because they respectively imagine that they might derive some benefits and besides "it is nice to do this or that;" and lastly, the remainder, who know that, by adopting and following political tricks and beating the drums as hard as they can, no matter who might get a beating incidentally in the act, they would advance their own standing, gain much prestige and be "the leaders."

This last class is the small coterie which manages and rules the American Medical Association; also they and the second class constitute the membership of the American Medical Association, estimated at three per cent. of the whole medical profession. Of course there might be an infinitesimal number who are really sincere among the leaders, but I dare say their opinions are not incorporated in the rules of their association. When the association started on its mission it declared that, among others, it had three objects in view, to wit:

One, to drive out of existence so-called diploma mills; the other to drive out quacks from the medical profession; and the third, to stop the influx of too many members, or rather to limit the number of graduates. Now let us see what followed, taking them in reverse order:

Dr. Frank Billings, the president of the association, declared that there is an increase of twenty-five per cent. in graduates and one hundred per cent. in matriculates. See Statistics in Journal of American Medical Association, Vol. XLI, No. 7, August 15, 1903. So that its mission with regard to the third object has utterly failed.

In regard to the second, not only have the number of quacks not been reduced but on the contrary increased, and some have been driven into the formation of corporations, medical institutes and so on, which being soulless, know no limit in the matter of graft. Also, because of the constant fight among physicians themselves and the cut-throat policies and slanderous conduct, and incessant disagreements, there have sprung up all kinds of so-called healers who divert a good many shekels from the legitimate profession, such as it is. Almost every other more or less intelligent layman knows that physicians have no respect for one another; hence the masses of the people can not have very much respect for them.

The moment the graduate is on the threshold of his professional career, he

is educated to detest fellow members of the profession. For instance, supposing one is a graduate of a medical college, recognized as in good standing by its own state, after receiving his diploma he must go before a medical board of examiners, pay them ten, fifteen, or twenty-five dollars, which amount they divide among themselves, etc.

Why should one member enrich himself at the expense of another? This may not look so bad, but take for instance a graduate of a medical department of a state university, let us say of Nebraska. The university of Nebraska is a state institution managed by a board of regents elected by the people. The regents appoint the professors of the medical department. The governor of the state and a few other state officials are members of the state board ex-officio. Supposing John Smith, who holds a diploma from that institution, to which diploma there is affixed the signatures of the governor, board of regents and members of the faculty, why should he have to go before another body to be examined and pay a fee? Will this body be better able to judge John Smith's qualifications than the man under whose tutorship he spent the time required? Is it not an inconsistent law which provides that the governor shall appoint a few individuals to question his own signature as well as the state institution which the law established and the people maintain? Let us be frank about admitting facts and let us banish theories which are inconsistent and absurd. If John Smith is an intelligent individual he is forced to the one conclusion, which is that there are politicians even in the medical profession and that politicians as such seek the passage of laws which might benefit them.

Now, as to the first, with regard to diploma mills, I dare say that the only way that they can be made to shut down is to take away the requirement of preliminary education from their respective jurisdictions. In other words, let there be a law passed providing that there should be a board of regents somewhat on the style prevailing in the state of New York who should also have visitation powers to the different professional schools to see that they comply with a curriculum and have the necessary means and facilities for teaching before they shall be empowered to grant degrees. This would be the only effective way. As it is the editor of the American Medical Journal has characterized as a diploma mill even the homeopathic medical department of the state of Iowa, which institution every one in the profession ought to know is above reproach. Let there also be provided a board of health composed of one member from each school of practice to be appointed by their respective societies who shall examine the genuineness of the diplomas and that the holder thereof is the legal owner, and be granted a certificate entitling him to practice by the payment of a fee of one dollar to cover their actual expenses. After procuring the license he shall register it with some county official. Should he desire to remove to another state, let it be sufficient for him to send his certificate to the members of the board of health of the latter and an affidavit that he is the legal owner and he should be granted one which will entitle him to practice in that other state, which in return he should file with some county official in the county where he intends to practice, etc. In other words, let us see that the roots are in good condition, (the medical colleges and the preliminary education of the would be M. D.) and the branches as well as the fruit, (the M. D's. preliminary and medical education) will take care of themselves. In this matter we should have agreeableness, tolerance, fraternal consid-

eration, broad mindedness, etc., among the medical profession.

About ten or fifteen years ago, while not organized a la Morgan, there used to prevail a good deal more of fraternal spirit among physicians than at present. Another thing, let the man practice according to his own idea, conscience and conviction and let there be no prosecutions. I believe I saw a remark in your journal in which the writer declared that the only way to get rid of imposters and so on is to give them all the rope they want. And history proves that statement to be true; for instance homeopathy and eclecticism may not have been independent schools had the regulars tolerated them or absorbed their teachings; likewise osteopathy.

Last but not least, had the so-called regulars been, either as individuals or as a school, tolerant and not persecutors, John Alexander Dowie and his teachings would have long been forgotten. So then let us be broad minded, tolerant and, chief of all, free from politics and we will have unity and exercise good will toward one another.

Particularly do I beg leave to call the attention of the reader to the fact that if barriers to emigration by physicians from one state to another are not removed, there will be in due time more advertising physicians than exist at present. Because, if a man holding an M. D. degree and unable to earn a livelihood in the place where he is settled, can not by an easy method and little expense go to another, where he has reason to think that he might, he will he driven into the advertising business. I know of many such cases. Under the present system it is no easy matter for a physician to change his location when we take into consideration the expenditure of money and the loss of time incident to the change. If you would know of the hardship and difficulty, just try it. Not that only, but also the persecution of M. D's. who advertise and the stringency of emigration, some may unite their forces with christian scientists, mental and magnetic healers and all other people who do not beleive or tolerate class legislation, and the laws relating to the practice of medicine and the method of practice will be entirely wiped out. The body of physicians will stand very little show against such an array of humanity. And, as a matter of fact, do not the present medical laws work a hardship on physicians only? How can a law be a good one which is detrimental to the men or class of men who passed those laws? It should amuse one when he reflects that one of the objects the American Medical Association has in view is to drive out of business physicians who advertise (so-called quacks) and impostors, such as mental healers, christian scientists, etc., etc., for the reason that it might do the latter (which I strongly doubt,) but cannot do the former. And truly, how many physicians are free from the imputation of advertising themselves. Take for instance "the leaders" of the American Medical Association; does not the office they hold advertise them? And do they not seek the respective offices because of the advertisment incident thereto? In every city and country paper you will find names aglore of physicians. Here is a sample of an advertisement in a weekly paper which happens to be on my desk. "Drs. J. D. and B. A. have yesterday performed a most diffieult operation. It was an amputation of a right leg about five inches below the knee." I happen to know the two gentlemen who are members of the county society, in which they reside. A president of a state board of health and medical examiner distributes every year calendars in stores, offices, etc., on which a large building is lithographed and underneath of which is the following, "Dr. J. D. F's. Sanitarium." What

do you call it, advertising or not? However, let me say that advertising, and particularly in a manner tinged with false pretenses, in the public press is wrong; but then if you would lessen the number of advertisers, grant a free and easy emigration to physicians, as no man is willing to starve because of a code of ethics if he can without loss of time and expenditure of money go where he may succeed without advertising. There are many physicians who became successful after changing locations once, twice and three times.

Reciprocity as advocated by the American Medical Association will never be a fact, because physicians, and particularly the political class who dictate legislation, are too selfish and narrow minded. Here is an example: Texas reciprocates with Missouri only as those licentiates whose licenses date after July, 1902, or 1903; I forget which year the Missouri law was passed. What about those who were licensed before that date? Why, they are not to be regarded as good! Is that consistency, broad mindedness and fraternal consideration? Is that the way to form unity amongst men belonging to one profession? Here is another: A member of the State Board of Missouri told me that Kansas desires to reciprocate, but that the former cannot entertain the proposition of the latter because "the fees" are not equal. Verily I say unto you that physicians are physicians. They may know much or little about medicine, but that is all. If we should assume that the removal of barriers and tolerance of easy emigration by physicians from one place to another will be a means to let in the advertising class, I must take issue and say that the assumption is wrong. Furthermore let me say that many of the advertising physicians, and particularly those who advertise themselves, and on their own account, and are not hired by medical companies, institutes, etc., are capable men. This, between ourselves. They are men who had a good medical, as well as excellent preliminary education. Of course many of them make false pretenses in that they promise radical cures, etc.; but is it compatible with common sense and consistent with the desire for unity to keep the whole profession in bondage because there are a few black sheep among them? And have the barriers let down by the medical profession, succeeded in driving out the black sheep from among their midst? Is there any state which is free from advertising physicians, and particularly imposters? Aye, more! Is the official organ of the American Medical Association free from the imputation of running ads. of proprietary drugs which have little or no value to them? When one glances over the pages of the "official" organ and thinks at the same time, he can certainly not believe that everything advertised is of absolute value, and also that it had assumed or been successful in obtaining the official name for the purpose of making money. In fine, I, for one, have come to the conclusion that the assertion made in the July issue of your esteemed journal, that the American Medical Association is really controlled and managed by a small coterie of men for their own personal benefit, and that the subjects they advocated and the things they will do are merely used as cloaks, rather as pretenses, to throw sand into the eyes of the physicians, toleration of which can be to their detriment only; for what benefits does a man have from being a member of the American Medical Association? But think of the benefits to those who manage and control it. I am astonished at the apparent indifference and short sightedness of the independent medical journals. J. M. B——, M. D.

Nebraska.

The Recorder is not a calamity howler nor has it any special grievance against the American Medical Association, but considers it well to face certain facts. The American Medical Association numbers only a very small per cent. of the profession in its membership. A very large number of physicians are decidedly antagonistic to it. Why is this? One reason is that many physicians regard the association as an adjunct to a publishing business, others regard the association as responsible for the condition of medical laws. We have received many communications expressing these ideas. These communications are from well educated physicians, men who are graduates of leading medical colleges and in good standing. We have not the space to publish all these articles but publish the above as it presents the ideas contained in the various other articles. Without a large amount of special preparation it is almost impossible for a physician who has been out of college a few years to pass a state board examination. In looking over reports of state boards we notice that the majority of those taking the examinations, who are not recent graduates, fail. Many a good man who has been turned down by a state board becomes a medical nihilist; he is forevermore against state boards, state medical laws and medical societies. If the American Medical Association would direct its efforts to bettering the condition of the profession it would have a larger proportion of the profession on its membership list. In the Journal of the American Association, Aug. 22, 1903, appears the following by Dr. L. A. Borton, of Plymouth Ind.:

"I notice in the Journal, Aug. 8, in the report of the Ohio State Board of Registration, that candidate 172, graduate of the Columbus Medical College, class of 1878, failed with a per cent. of 65⅝, and, in fact, all who failed are old graduates with the exception of one, and that one a foreigner. All who passed are graduates of a recent date. Now the physician who graduated in 1878, with about a quarter of a century of practical experience to his credit, ought not to be turned down by the Ohio board, or any other state board, and state reciprocity should be so arranged that a physician licensed by the state in which he practices, and endorsed by the medical profession or couuty or state medical societies, should obtain a license to practice in any state on presentation of his state license and recommendation by the secretary of the state board of medical registration which issued that license showing that he is in every way eligible for registration.

The trouble with the so-called reciprocity is that it has too much red tape. A physician who can legally practice in one state ought to be legally able to practice in another state without having to submit to the indignity of a technical examination before a board who are not appointed for their qualifications, but for their political influence.

A licensed physician in any state should be able to practice in any state or territory that is under the American flag, and any physician who has legally practiced continually for ten years or more ought not to be questioned regarding his capabilities, but should be considered competent and recognized as such."

✱ ✱ ✱

I wish to obtain from some brother M. D. a most advisable as well as best cure for liquor, drug and tobacco habits. I have several cases on hand which have failed under my system of treatment.

I also would like to know of a good, well tested anaphrodisiac.

F. C——, M. D.

Chicago.

SIMPLE GOITRE.

My experience with goitre has not been extensive, but I have one very interesting case in mind which others might read of with profit.

The patient, who was first seen over two years ago, is a strong, healthy girl fifteen years of age. When she first came under my care she had a moderate bilateral goitre of five years standing. It was of such size as to greatly interfere with the clothing at the neck and was readily noticeable. No treatment had ever been taken, but several other physicians had been consulted, who would advise nothing but excision of the gland. The patient was first put on potassium iodide, which was increased to the limit. Inunctions of mercurial ointment were used locally, together with the faradic current.

This treatment was continued for eight months without any apparent change. She was then put on thyroids, five grains three times a day, the electrical treatment being continued. No untoward effects were noticed at any time. The only change apparent was the increased weight and general appearance of perfect health.

At first the powder enclosed in capsules was used, which were afterward alternated with tablets.

The thyroids were stopped for a few days every six or seven weeks, but outside of that have been given continuously for almost two years.

After this treatment had been used for six months the goitre began to gradually diminish in size, and at this writing could not be detected. It will now be discontinued unless the symptoms return.

Less than a year's treatment of these cases will effect little, and two or three years is no longer than can be counted on in many cases. It takes patience on both sides, but if lasting results are obtained it is worth the cost.

This is eminently better than operation, if it will effect a cure, when we consider the unpleasant symptoms likely to ensue from such a procedure.

H. A. GILTNER, M. D.

Chelsea, Indiana.

RACE INCREASE.

A physician 180 degrees off writes me about my "Race Suicide" letter. He asks:

1. "Do you think it just and right for married people to beget children under our present social and economic conditions?"

Answer. The above conditions were never better than now, so if we are in error begetting, it has been an error all along. And we can't get to the bottom of that.

2. "What future has a girl baby save ultimate marriage?"

Answer. There are other futures than marriage, but none are half so desirable.

3. "What future is there before a boy more than wage slavery?"

Answer. Wage mastery as the words imply. And I know of no road but that of service to the goal of mastery.

The whipped servant was the now nearly extinct slave.

To tell a servant that he is a slave is to inform him that he is being wronged or whipped and should rebel. The overseer is compelled or persuaded to be more just, and the servant becomes a malcontent. In the course of these conditions things tend to get gradually better but not painlessly.

In man's past slavery even has been a stepping stone to better things.

4. "What do we get in this world, save enough to eat, drink, wear and a grave at the end?"

Answer. Those may be enough to

get, but perhaps not enough to give. We should be devoutly thankful, if we get the things above mentioned and busy ourselves in seeing that others get them, although the last mentioned should not usually be crowded upon others.

5. "Is life worth living?"

Answer. I beg to ask who has the authority to say it is not? We suppose it is, for none can prove that it is not.

6. "Would it not be better if no more children came into this world?"

Answer. I observe that heads of large families are not so apt to be hard up as heads of no families and small families.

Under polygamy in Utah a family was usually prosperous in proportion to its population. I regard babies as good investments, so does my wife. They are something for us to work for, to live for and to plan for. A man is perfectly justified in bribing his wife into having all she can. To a husband a wife should be more beautiful when pregnant, and the oftener so the better.

7. "Is it selfish to beget a child?"

Answer. It is, or should be. That kind of selfishness is a mighty good thing all around. Thank God we are not wards of charity at the start, so we have that much to be proud of.

8. "Is it not cruel to bring a child into this hard, selfish world?"

Answer. Personally the writer is always glad to jump up and clap his heels together at the joy of living. Now who is not? What doctors are for, is to make people live, and want to live, and want others to live. As for the suffering, if that comes in a good cause it is but a painful pathway to a bright abode. If it comes from sin it is but the work of a kind surgeon.

9. "But as to the suffering of an innocent babe; how about that?"

Answer. Could we look into the pre-existence, we might understand.

10. "Should we encourage child bearing?"

Answer. Yes, because in the pre-existence they are frantic to pass here. The moments of earth are as nothing. Earth is as the Isthmus of Panama is to the two continents. Man is not a mere little earth concern. Man comes up from deep eternity and marches on to become a God, in other words he becomes the greatest being of which he is able to conceive.

To wish to become a parent is a sublime ambition, selfish though it be; without that ambition the furnace of love is left without a fuel. Love grows to be a monster when the desire for offspring is persistently restrained. They who want not offspring will soon preach to you that "marriage is a failure." I teach my daughters to fit themselves to become wives and mothers. Their mother's ambition is to become a mother just as frequently as she can, yet for all that she can mount the stump on a minute's notice and debate any of the great political issues with professor or politician.

This antipathy to motherhood is cowardly on the part of woman, and this trying to find an excuse for it is only chasing the devil around the stump. When civilization gets too elaborate for paternity it needs pruning, otherwise it is almost sure to perish.

It was the man who buried his talent in the earth that stayed poor, and got it in the neck. Our sexual systems are for use. It is man's business to multiply all he can.

God will do the rest, if we work on with faith in Him.

C. E. Boynton, B. S., M. D.
Los Banos, Cal.

Dr. J. D. Batson has reported a case of strychnine poisoning successfully treated with pilocarpine hydrochlorate. The patient, aged two and one-half years, was in tonic convulsions and death was imminent. The patient made a good recovery.

The Wisconsin Medical Recorder.

A Monthly Journal of Medicine and Surgery, devoted to the best interests of the whole profession.

J. P. THORNE, M. D., Editor and Publisher, Janesville, Wis.

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Letters, Case Reports and **Questions** are desired for our Discussion Department.

Society news and reports and items of interest are gladly received.

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FOOD ADULTERATIONS.

It is an encouraging sign of progress that gradually more attention is being given to pure foods. It does not seem possible that men could be found who would be diabolical enough to put positively injurious adulterants in foods, but it is sadly true that for the money to be made some very injurious things are sold, Wood alcohol in flavoring extracts, injurious coloring matters in canned vegetables, paraffin and other adulterants in candies, are a few of the common adulterants of foods. Some states are fortunate in having pure food laws vigorously enforced, others have laws but do not properly enforce them, and still others pay no attention to pure foods. Wisconsin has a pure food law partially active but the citizens of this state should insist that funds be appropriated for the complete enforcement of the law. Pure food requirements cannot be too strict.

The daily press has recently presented accounts of a most vile compound which is being sold for canned tomatoes. The following report shows the commendable action taken by the Pure Food Commissioner of Pennsylvania:

State Dairy and Food Commissioner Dr. B. H. Warren charges that a member of the Retail Grocers' Association has been selling canned goods labeled "Pure Canned Tomatoes", which upon examination have proved to be nothing but a miscellaneous assortment of vegetables, including a few green tomatoes and red paint, the whole having the appearance of red ripe tomatoes.

THE MOSQUITO'S ENEMY.

The world is getting some very practical results from the discovery of Drs. Reed, Ross and Lazear that malaria and yellow fever are transmitted by mosquitoes. The methods of fighting mosquitoes is by sprinkling pools and marshes with petroleum or naphtha, clearing out stagnant pools, cutting down grass, weeds and brush near dwellings, where mosquitoes breed. The government has been pursuing investigations to find a parasite which will prove destructive to this pest and eradicate it as some of the insect pests of agriculture have been destroyed. Dr. Wardell Stiles, of the Public Health and Marine Hospital Service, has announced a successful outcome of his investigations. He has found the natural enemy of the mosquito to be a small worm, the agamomeris. The newly hatched worm is one-twentieth of an inch long, attaches itself to the larval mosquito, and bores its way into its abdominal cavity. The government experts will now devote themselves to the study of the methods of producing favorable conditions for the growth of this enemy of the mosquito. The death of the mosquito seems to be assured.

THE DOCTORS' WORLD.

Therapeutic Briefs, Medical News Items, and Clinical Notes on Medicine and Surgery.

A Rival of Helen Keller.—Helen Keller, the world's wonder as a highly educated deaf, dumb and blind person, has a rival in Katie McGirr, a nineteen-year-old graduate of the New York Institute for the Deaf and Dumb. The following report of her graduation gives an idea of the talent of this remarkable girl:

Miss Kate McGirr was born blind, deaf and dumb. She delivered the salutatory address in a pleasant voice. Her enunciation was sufficiently clear for most of her audience to understand. The degree of perfection which she has attained in speech is one of the points of superiority over Miss Keller which her instructors claim for her.

"Helen Keller has in certain directions powers I have never seen equaled, even among those who can see and hear," said Rev. E. H. Currier, the principal of the school in comparing the two girls. "She has a nature peculiarly responsive to outside influences. But along practical lines I consider Miss McGirr to be further developed."

The special praise for development in scholarship and character was awarded to Miss McGirr. Besides her intellectual training she has received instruction in sewing and is an accomplished seamstress. She is also an adept typewriter.

Early Diagnosis of Tuberculosis. The early diagnosis of tuberculosis is very important as it is often easy to cure the disease in the very early stages by the remedial measures now at our command. At some sanitariums 75 per cent. of the patients treated in early stages have been reported cured. This subject was thoroughly discussed in a receent meeting of the Maritime Medical Association reported in the Maritime Medical News:

Dr. E. L. Trudeau, speaking of the importance of the early recognition of tuberculosis, said persistent slight cough with loss of flesh and strength, slight afternoon rise of temperature and constant lassitude are the symptoms which, even without physical signs, point in many cases to incipient tuberculosis. These are too often disregarded. This and the disinclination of the physician to alarm him explain in great measure the waiting policy which is so often adopted and which generally proves fatal.

In conclusion I quote Latham:

"On what grounds then are we justified in making a positive diagnosis of early pulmonary consumption? In many cases the difficulties are not great. We are enabled to make a positive diagnosis when: (1) Tubercle bacilli are present in the expectoration or saliva, provided that no source for these is to be found in the mouth or upper air passages. (2) Haemoptysis even to such a small extent as a teaspoonful, if associated with suspicious physical signs or symptoms, and a careful examination of the patient reveals no evidence that the blood comes from the upper air passages, or is dependent upon some other lesion than tuberculosis. (3) We find diminished resonance and increased resistance to the finger, associated with the presence of persistent crepitations or fine rales in situations in which tuberculosis usually starts, the apices of the lung, especially towards their posterior aspect."

The Knowledge of a Lifetime.—Few people stop to realize that the valuable advice or service given by the physician or surgeon represents the knowledge of a lifetime. Some physicians do not realize this sufficiently. The physician or surgeon spends a lifetime in study, research and practical work. When he gives the result of his life's work he is entitled to proper remuneration. The artist, Whistler, who recently died, fully realized the value of the ripe experience of a life's work. In a lawsuit Whistler was put in the witness box and the painter was ironically asked by the defendant's lawyer (Sir John Holker) how long it had taken him to "knock off" his picture—the Graham "Nocturne in Blue and Silver." Well, drawled the imperturbable Whistler, seeing the trap, and willingly stepping into it, perhaps he had taken a day over the picture—maybe he had added a final touch or two on the next day. On the whole, he would answer that it had taken him as much as two days to "knock off" this particular work. "So," snapped out the lawyer, thinking his case as good as won, "the labor of two days is that for which you ask 200 guineas!" "No," replied the painter, in a tone that went to the farthest corner of the courtroom, "I ask it for the knowledge of a lifetime." There was a moment's silence in the audience, while the larger idea suggested was working, then an outburst of applause. Sir John Holker had no more appetite for badgering witnesses that day.

Alcohol as a Germicide.—For years alcohol has been used in various ways for its germicidal action, but its exact power in destroying bacteria has not been thoroughly understood. Recently Drs. Harrington and Walker have completed a series of valuable investigations which show the germicidal action of alcohol. Their conclusions, as presented in the Boston Medical and Surgical Journal, are:

1. Against dry bacteria, absolute alcohol and ordinary commercial alcohol are wholly devoid of bacterial power, even with twenty-four hour's direct contact, and other preparations of alcohol containing more than 70 per cent. by volume, are weak in this regard, according to their content of alcohol,—the stronger in alcohol, the weaker in action.

2. Against the commoner, non-sporing, pathogenic bacteria in moist condition, any strength alcohol above 40 per cent., by volume, is effective within five miuutes, and certain preparations within one minute.

3. Alcohol of less than 40 per cent. strength is too slow in action or too uncertain in results against pathogenic bacteria, whether moist or dry.

4. The most effective dilutions of alcohol against the strongly resistant (non-sporing) bacteria, such as the pus organisms, in the dry state, are those containing from 60 to 70 per cent. by volume, which strengths are equally efficient against the same organisms in a moist condition.

5. Unless the bacterial envelope contains a certain amount of moisture, it is impervious to strong alcohol; but dried bacteria, when brought into contact with dilute and alcohol containing from 30 to 60 per cent. of water by volume, will absorb the necessary amount of water therefrom very quickly, and then the alcohol itself can reach the cell protoplasm and destroy it.

6. The stronger preparations of alcohol possess no advantage over 60 to 70 per cent. preparations, even when the bacteria are moist; therefore, and since they are inert against dry bacteria, they should not be employed at all as a means of securing an aspetic condition of the skin.

7. Provided the skin bacteria in the deeper parts can be brought into contact with disinfectants, alcohol of

60 to 70 per cent. strength may be depended upon usually, but not always, to destroy them within five miuutes.

Tuberculous Patients.—It is often wise to send tuberculous patients to a favorable climate, but again it is very unwise to do so. When patients are sent away from home it should be done as early as possible before the disease has had a serious effect on the patient. Many a case of tuberculosis is now cured at home by methods now at our command. Dr. Martin L. Stevens recently wrote an article on this subject for the Philadelphia Medical Journal and presented the following conclusions:

Under no circumstances should a tuberculous patient be permitted to leave home with a false conception as to the nature of his malady, and without knowing his responsibility to those with whom he comes in contact. No one likes to be the bearer of unpleasant intelligence. But false ideas of sentimentality should not stand between the physician and his duty. The patient cannot carry out directions intelligently and do that which is necessary to effect his cure unless he understands the reason for it; and he is a menace to the health of those about him unless he takes proper precautions to prevent the spread of his disease. He needs to know also that the public is more or less afraid of him, and that in some places he may be put to inconvenience in finding suitable accommodations. This fear on the part of the public is well founded and is increasing by the fact that there are yet many patients who have been told that they had bronchitis or throat trouble or dyspepsia or weak lungs, and who, knowing no need of precaution, go about expectorating everywhere and scattering the disease broadcast. The responsibility for this rests with the family physician. Many of these cases do not, unless an emergency arises, fall into the hands of the physician in the places to which they go. Those physicians who deceive their patients in this matter usually belong to the class who have not yet learned that the disease is amenable to treatment, and who only aid to guide them comfortably to the grave instead of back to health and usefulness. Those of their patients who go to the health resorts are usually advised by them to take no treatment, but to live outdoors, take plenty of exercise, drink plenty of whiskey, and rough it. And how often have we seen patients with excavations in some portion of the lung, and whose temperature each day reached perhaps 3° above normal, trying to carry out such service, exhausting themselves by long walks or even riding horseback, taking life in hand every time they mount the saddle, and supporting their feeble strength by the too liberal use of alcohol. That occasionally a patient gets well in the face of such obstacles only proves the curability of the disease and not the wisdom of the treatment.

So before sending your patient away from home consider whether he will be benefited.

Consider his character with reference to the influence it will have upon his prospect of recovery.

Consider his financial condition, and that, if sacrifice has to be made, it is the part of wisdom and economy to make it early.

Consider his need of medical care and control wherever he is, and that good treatment in an unfavorable climate is better than a favorable climate without treatment.

Consider the facilities which the health resort offers for the cure of his disease, rather than those offered for his pleasure.

Consider the need of candor as to his condition and his responsibility to the public.

MEDICAL RHYMES

A COUNTRY DOCTOR'S SOLILOQUY.

By M. R. Wilkinson, M. D., Oconomowoc, Wisconsin.

From the country one morning early to the city I hastily ran
To purchase some needed appliances to keep along in the van.
I called to see a professor, one I loved dearly to greet.
While waiting, I sat near a window giving a view of the street;
Across was an office building, with windows tier upon tier,
Everythlng black and sooty, the same from year to year.
My mind began reflecting upon the city doctor's life;
My feelings ran in a tender vein, as I tho't of the smoke and the strife.
The building towering upward, looked to me like a pigeon coop,
With men at work in the windows, a haggard and palefaced group.
Pigeon-holed in the city would never do for me;
I love to be out in the country, where God's green earth I can see;
Where the air is pure and wholesome, and the eye has a feast for a king;
Where blossoms exhale their fragrance, and birds enraptured sing.
I bethought of a wordy warfare, I had read some months ago,
Between a city doctor and one where the sagebushes grow;
And I tho't that the sagebush doctor, to the other could give the palm;
He could well afford to do it with feelings kind and calm,
For what has his city brother to pay him for all his pains?
Nothing, nothing, nothing, nothing but money and brains,
While we who toil in the country have blessings they never know,
With a world of brightness about us, where faces with innocence glow.
We of course do not get the money to be had in the larger marts,
But we have something better, for we have the people's hearts.
Toil on you city martyrs, there is Him who his blessings will give
To the overworked city doctor who exists but does not live.

THE DEAD BEAT.

By C. E. Boynton, B. S., M. D., Los Banos, California.

There's a streak in human nature
  That perplexes me today:
How a man can have his life saved,
  And never try to pay!

How men with dollars plenty,
  Can seek a charity
To take them through an illness,
  Seems quite a mystery.

Why, the begger man is nowhere!
  When asking for a crust;
And the thief is twice as honorable
  When searching for your dust.

But the man who never tries to pay
  The one that lends a hand
To drag him from the ditch of death,
  Should wear a traitor's brand.

Some people hold their money
  In one hand and say: "Let's see,
Is my child's life, on the other hand,
  Worth that much cash to me.

If the doctor charges twenty-five
  To pull this baby through,
And a coffin cost but twenty,
  I will see what talk can do."

The doctor, clear disgusted,
  Will say: "Just have your way,
I'll bring your darned kid out of this,
  The devil take the pay!"

And when the kid is well and strong
  The doctor sends his bill;
Then hears a wail of poverty
  That makes your heart stand still!

To the woes of that whole outfit
  He fain must listen long;
Yea—and a miser's money bag
  Grinds out the same old song.

And if the whole bill comes to ten
  You wait till fall for five—
And pay that out for instruments
  To keep his nibs alive!

And hear about "Doc. Cheap John
  That cures us for two bits;
How easy he was on us
  When George Washington had fits!"

THE DOCTORS' LIBRARY

This Department contains each month reviews of the latest and best books. Items of book news will keep readers informed on progress in the world of medical literaure.

THE MEDICAL AND SURGICAL USES OF ELECTRICITY, Including the X-Ray, Finsen Light, Vibratory Therapeutics and High Frequency Currents.—By A. D. Rockwell, A. M., M. D., Formerly Professor of Electro-Therapeutics in the New York Post-Graduate Medical School, Fellow of the New York Academy of Medicine. With 250 Illustrations. New Edition. Pages 656. Cloth, $5.00. E. B. Treat & Co., 241-243 West 23d St., New York.

Electricity has become a necessity in the modern practice of medicine, and no physician's armamentarium is complete without some good electrical apparatus. But a good treatise on electricity is as necessary as good apparatus for successful work, Rockwell's treatise fills all the requirements of a voluminous and accurate guide in electro-therapeutics. The central idea of the work is the nutritional influence of electricity. The author gives the following enunciation of the idea:

"1. Electricity, besides being merely a local stimulant, also exercises an influence over general and local nutrition at once unique and unrivaled, entitling it to the highest rank among constitutional tonics.

"2. The accepted system of making the applications exclusively local is both illogical and inconsistant; that in the use of electricity, as of every other remedy, constitutional diseases should be treated constitutionally.

"3. That the best method of bringing the whole system under the direct influence of the current is by general electrization; and that by this method the success of electro-therapentics is materially enhanced and its sphere greatly widened."

A knowledge of electro-physics is necessary in order to be a master of electro-therapeutics, so the author wisely devotes one section of the book to a clear exposition of the subject.

The second section of the work is devoted to electro-physiology, a very important subject which is well handled. The section on electro-therapeutics is very complete. An interesting history of electro-therapeutics is given. Dr. Rockwell explains at length the general therapeutic action of electricity and gives the best method of general electrization. The section of the book devoted to electro-surgery is so plain that the reader can become a master of the art.

The last section of the volume is devoted to the very latest in electricity—the X-ray, Finsen light, vibratory therapeutics and high frequency currents. All these new applications of electricity are well presented. The book is a master-piece on electricity and is needed in every medical library. It is beautifully printed and bound and the many excellent plates and cuts enhance its value.

INTERNATIONAL CLINICS.—A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and Other Topics of Interest to Students and Practitioners by Leading Members of the Medical Profession Throughout the World. Edited by A. O. J. Kelly, A. M., M. D., Philadelphia. Vol. II, Thirteenth Series. Pages 311. Cloth, $2.00. J. B. Lippincott Co., Philadelphia.

This volume contains many valuable papers, to a few of which we are glad to call attention. Two articles well worth the price of the book are "Symptoms and Treatment of Disease of the Pancreas," by Eugene L. Opie, M. D., and "Diagnosis and Surgical Treatment of Disease of the Pancreas", by John B. Deaver, M. D., and George P. Muller, M. D.

Dr. Opie says in opening his article: "Few conditions present greater difficulties cf diagnosis than do the various forms of pancreatic disease. Disease of the pancreas is rarely recognized during life, since the symptoms, though not infrequently of great severity, present little that is characteristic."

"Trunecek's Serum in Arteriosclerosis," by L. Levi, of Paris, presents some very useful information on the treatment of the disease. "The Rest Treatment; When Indicated and How Conducted," by J. M. Taylor, M. D., and "The Etiology, Prevention and Treatment of a Common Cold," by Alexander Haig, A. M., M. D., of London, are two articles which every practitioner will enjoy reading.

Dr. Geo. W. Gay contributes "The Diagnosis and Treatment of Hemorrhoids," and Dr. Roncali, of Rome, writes on "The Surgical Relief of Traumatie Epilepsy."

A very valuable article is "Surgical Intervention in Paralysis of the Ocular Muscles," by Dr. E. Landolt, of Paris.

The work is well illustrated with cuts and plates. It has a good index and will be frequently used as a reference work by every doctor who buys it.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS.—Comprising Ten Volumes on the Year's Progress in Medicine and Surgery, Under the General Editorial Charge of Gustavus P. Head, M. D. Volume VII —Pediatrics, by Isaac A. Abt, M. D., and Orthopedic Surgery, by John Ridlon, A. M , M. D. June, 1903. Pages 232. Cloth, $1.25. The Year Book Publishers, 40 Dearborn St., Chicago.

This series of books has won a high place in the estimation of the profession. In this volume Dr. Abt reviews the year's progress in pediatrics in a concise style, and adds some notes from his own experience.

Dr. Ridlon's review of orthopedics is of interest, especially his discussion of Dr. Lorenz's "Bloodless Surgery". He says: "In hip disease his aim is to procure a solid anchylosis of the hip joint with the leg in good position. All American orthopedic surgeons aim to cure the joint without anchylosis and with the leg in good position, and usually accomplish this, not infrequently ultimately obtaining a normal range of motion, a result which every one has seen, but which Prof. Lorenz will not admit as a possibility." The book contains twenty illustrations.

PLAIN HINTS FOR BUSY MOTHERS.—By Marianna Wheeler, Superintendent of the Babies' Hospital, New York; Author of "The Baby", Etc. Illustrated. Pages, 57. Price, 35 cents. E. B. Treat & Co., New York.

The book is written by a trained nurse for the guidance of mothers. The author thus gives the object of the book in her preface:

My object in this small booklet is to try and give a few simple practical suggestions, by which the busy mother, who has her hands more than full with several small children to wash, dress and be made ready for school can, by a little planning, keep her baby sweet, clean and healthy.

BOOK NOTES.

The latest in medical journalism is the Daily Medical Journal to be started in New York, October 1, by a stock company. The editor will be Dr. A. W. Ferris, editor of the Medical Critic.

McClure's Magazine always has some strong articles entirely different from the other magazines. A leading one in the September number is "A New Industrial Conspiracy", by Ray Stannard Baker, showing how labor and capital hunt together in Chicago. Another one is "The Conquest of Five Great Ills", by Cleveland Moffett, showing the work of the Pasteur institutes throughout the world. Clara Morris presents a sketch of Alessander Salvini. Short stories and pictures furnish much delightful entertainment. McClure's always gives good big value for the money.

The September issue of "Success" opens with a very fearless article by E. Benjamin Andrews, chancellor of the University of Nebraska, entitled "If I Should Go to College Again." This number of Success contains several other important and timely articles. One by Vance Thompson, is entitled "Sergius de Witte, the Right Hand of the Czar." "How Dictionaries Are Made," by W. C. Stiles, gives a complete account of a remarkable and little known industry. Ray Stannard Baker tells how the sun motor is being used in place of steam. Josephine Wright Chapman writes interestingly about "Architecture as a Profession for Women." Dr. Orison Swett Marden's editorial is on "The Value of Friends."

Burton Egbert Stevenson's new romantic novel, called "The Blade That Won", is published complete in the September number of Lippincott's Magazine. It is replete with adventure and alive with tenderness. The assistance given a gentle maid in defending important papers introduces the hero to his love and the reader to them both without tiresome prelude. The tale is told with refreshing simplicity and directness and offers no temptation to take a nap between chapters. The number contains the first of a series of pithy literary papers by George Moore, who wrote those famous "Confessions of a Young Man." Part I of these "Avowals" asks and answers the question, "Why is it that England has failed to produce a first-class work of fiction?" This will doubtless provoke no end of argument. Six capital short stories and four excellent poems are also in the number. The "Walnuts and Wine" department has a gamey flavor and there is nothing stale to be found in it.

Everybody's Magazine for September reaches the highest standard of magazine publishing it has yet attained. A glance through its pages convinces one that the publishers are at least approximating their expressed purpose to make a magazine for everybody. The 144 pages which they are running enables them to cover a vastly larger number and a vastly wider variety of subjects than is possible to the average ten-cent magazine. In this September number of Everybody's it would seem as if every phase of human activity and human interest has representation. Theodore Waters writes an article on "Radium and Human Life", which presents the clearest account, the discovery and possibilities of this wonderful element we have seen. A few of the other articles are: "The United States of Europe," by Emily Crawford; "Five Hundred Trains a Day." by Lawrence Perry; "The Hunter's Month," by Emily Watson; "The Art of Getting to Sleep," by Harvey Sutherland; "The First Woman Ambulance Surgeon," by Marian West.

MODERN THERAPEUTICS

Brief original communications and short abstracts giving the latest in therapeutics.

OBSTINATE HICCOUGH.

By F. C. Gay, M. D., Brooklyn, N. Y.

A recent experience shows the power of chemical lymph over disordered conditions of the nervous system. The patient, a lady about 35, mother of two children, was taken with hiccough in March, 1902, without any previous sickness or apparent cause. The trouble had been continuous ever since. Of course she had not hiccoughed all the time but for several hours every day. All known remedies had been faithfully tried under the direction of four good physicians with no perceptible effect, and the patient had become pale, weak and nervous.

Hypodermic injections of chemical lymph No. 2 were commenced August 8, 1903, ten minims twice a day. Hiccough stopped after three days, but treatments were continued a week, when the patient went away for her annual visit to the country.

AN INTERESTING CLINICAL CASE.

By Dr. Matias Duque, Director of the San Antonio Hospital.

Abstract from the Revista Medica Cubana, April 15, 1903.

X, a white woman, 22 years of age, was taken into the hospital on account of syphilitic skin disease (roseola papula); a blennorrhagic vaginitis of most violent description with strong congestion of the mucous membranes of the vagina. The latter was of violent hue, somewhat brittle, and yielded abundant secretion of a greenish yellow pus, which showed under bacteriological examination abundant colonies typical of gonococcus, diplococcus and other varieties of bacteria. The gonococci infection reached to the neck of the uterus, whose tissues suffered from the same degeneration as the vagina. Above the mouth of the neck—from which a greenish yellow and somewhat thick pus oozed—was a syphilitic ulcer of the size of a dime, clean at the bottom, livid in color and rather deep.

Upon careful examination, the patient was found to be pregnant in the third month; and, from the start, was subjected to energetic treatment as a serious case.

Under the treatment employed she improved rather well; but, though the blennorrhagia was not cured, the syphilitic manifestations of the skin disappeared, and the ulcer at the neck improved somewhat, until confinement which took place at the eighth month, five months after her admission.

The confinement was normal. However, the patient was attacked by a great flux and suffered a complete laceration of the right side of the neck; an incomplete laceration of the left side; an incomplete laceration of the rear wall of the vagina; and a two-thirds laceration of the perinaeum. The placenta was removed at once; ample warm washes of a 1 per cent. solution of permanganate of potash were applied and the uterus was stimulated by massage, but remained inert. All this was reported to me by the house physician.

I arrived at the hospital four hours later in company with the well known gynecologist, Dr. Mendez Capots, who upon having examined the patient, de-

cided to sew up the lacerations. He washed out the vagina and uterine cavity completely; adjusted with the scissors the edges of the lacerated tissues; sewed up the wounds and touched the ulcer at the neck with the cauterizer; then he gave another wash and plugged with iodoform gauze.

When the patient was on the operating table, she had fever, 38.4°C. At 5 p. m. the fever was at 39°; then the vaginal plug was taken out and a great intra-uterine wash of a one-half per-cent. solution of permanganate was applied very hot in a quantity of five liters. The fever was at 40° throughout the night, and washes were given every four hours.

The following day, at 8 a. m., temperature 40°, same local treatment. The fever lasted all day, falling to 39° by the wash; but rose again to 40°.

The day thereafter, fever at 41°; same treatment with more vaginal washes of bichloride of mercury, before the uterine washes; the fever keeps on at 41°.

On the next day at 8 a. m. (temperature 41.5°), I took out the stitches made on the day of confinement, washed well both uterus and vagina, dried the latter with carbolated cotton and conveyed into the uterine cavity eight grammes of pure hydrozone, taking care that this liquid should flow towards the vagina, into which I poured about 60 grammes of the same liquid and drained the uterus with simple gauze saturated in hydrozone while the vagina was drained by the same means.

From that time on the fever declined slowly, and at 6 p. m., it was apyretic. The fever did not return and the patient's cure proceeds without further difficulty.

This case, which is interesting by itself, proves of great value in setting forth two points; viz.:

1. That, although the intra-uterine injections of pure hydrozone may be dangerous, it can be applied if care is taken to keep the neck dilated as much as possible.

2. That in this case the superiority of hydrozone over the other treatments of puerperal septicaemia, in connection with gonococcia, is indisputable; and that this splendid result should encourage repetition of its application.

NOTE.—The son of the patient suffered from blennorrhagia in the eyes. He was treated with ¼ per cent. solution of permanganate and instillations of pure hydrozone twice daily, alternating with cauterization of 40 per cent. solution of nitrate of silver; and he kept his sight.

GERM DESTROYING AND NERVE SOOTHING.

The following excerpt from an article in the Virginia Medical Monthly, by Stephen J. Clark, M. D., No. 66 W. 10th St., of this city, plainly outlines the useful combination of two leading remedies in materia medica:

Binz claims specific antiseptic powers for quinine; other writers are in accord with him on this point, and report good results from large doses in septicaemia, pyaemia, puerperal fever and erysipelas. It is a germ destroyer of the bacilli of influenza (la grippe). Antikamnia and quinine tablets will promptly relieve in this disease. Quinine is a poison to the minute organism, sarcina; and antikamnia exerts a soothing, quieting effect on the nerve filaments. A full dose (two five-grain tablets) of this remedy will often arrest a commencing pneumonia or pleuritis. These tablets are also useful in the typhomalarial fever of the south—particularly the hyperpyrexia—both quinine and antikamnia, as previously said, being decided fever reducers. They are likewise most valuable in cases of

periodical attacks of headache of non-defined origin; of the so-called "bilious attacks"; of dengue; in neuralgia of the trigemini; in that of "ovarian catarrh"; and, in short, they are effective in every case where quinine would ordinarily be prescribed and without the "ringing" which generally accompanies the administration of quinine alone.—New York Medical Journal.

TREATMENT OF ANEMIC CONDITIONS.

By Fritz Euler-Rolle, M. D., Vienna.

(Continued from page 273, Aug. Recorder.)

I take the liberty of reporting only two more cases from the remaining 14, both relating to chlorosis characterized by severe symptoms, and illustrating very graphically the prompt action of this chalybeate.

The first case was that of a girl, 18 years old, who presented a well-developed type of marked chlorosis. There was marked anemia of the general integument, the mucous membranes were very pale, and she suffered since the last fourteen days with persistent headache and buzzing in the head. This was accompanied by palpitation and a feeling of weakness, as well as pronounced edema of the lower extremities up to the middle of the leg. Her menstruation was very irregular and profuse. Examination of the blood showed a much reduced color index, 20 according to Fleischl's method. The number of red blood cells was reduced to 3,100,000, the white not being materially increased. Although the patient had taken the greatest variety of iron preparations, they were not well tolerated. I therefore decided to administer pepto-mangan (Gude), enjoining at the same time rest in bed, which seemed indicated, if for no other reason than that of the condition of the heart and the attacks of weakness. The patient received at first two tablespoonfuls and after a few days three tablespoonfuls of the pepto-mangan, and this amount in the third week was increased to five tablespoonfuls daily. The effect was truly surprising; without the least disturbance of the gastro-intestinal tract, considerable improvement of her entire condition had occured at the end of four weeks, so that she was able to be up and about. She had a good appetite and menstruation was regular for the first time in months, while the cardiac palpitation, headache and buzzing of the head, as well as the edema, had vanished. Examination of the blood showed 3,980,000 red blood corpuscles and a hemogoblin percentage of 50 (Fleischl). After another four weeks the patient was completely restored to health, with a hemogoblin percentage of 70 and an increase in the number of red blood cells to 4,200,000.

The second case of chlorosis related to a girl, 21 years old, who since the begining of the disease had complained of a marked disturbance of the digestive organs. She frequently vomited and suffered with gastric pains and an increasing feeling of aversion toward all food. In this case also an examination showed the presence of severe chlorosis, complicated with anemia and emaciation due to the much-reduced ingestion of food. This case was the more welcome to me because it afforded a crucial test as to whether pepto-mangan can really be taken without any disturbance of the gastro-intestinal tract. I administered at first very cautiously, only three teaspoonfuls of the preparation, and, as this was completely retained and seemed to cause no disturbance of any kind, I increased the quantity on the third day to two tablespoonfuls and during the following days to four

tablespoonfuls, which dose was not exceeded. The preparation, therefore, completely fulfilled my expectations. In the course of three weeks the gastric and intestinal troubles had disappeared, the patient regained her appetite and was able to take an abundance of food, so that her weight had soon reached its normal level, while simultaneously with the disappearance of the chlorotic condition a considerable improvement in the state of the blood ensued.

In conclusion I would only add that during the administration of the peptomangan no unpleasant by-effects have been observed and that the preparation has always been willingly taken.

BOVININE IN CONSUMPTION.

There is no positive cure for consumption outside of an element or influence that restores normal nutrition that enriches the blood and builds the tissues. This being accomplished, nature does the curing. The sooner we all accept this demonstrated fact that general vital recuperation, by whatever means it may be accomplished, is the only cure that is scientific, that has ever been known or ever will be known, the less time we will lase in conducting the battle royal with this fatal scourge.

Patients who die of tuberculosis, starve to death. Those who recover from tuberculosis are fed to health—cured by feeding. Feeding, however, is not necessarily nourishing, no more than eating is assimilating. Thousands of victims of this wasting disease starve with stomachs full, and plenty more within reach. There is no dearth of elegant and costly viands—it is availability they lack. They call for an exhibition of vito-chemic force which the consumptive's stomach does not possess. Bovinine does nothing of the kind. It is living tissue pabulum in natural solution and instantly available. It responds at once to the demands of the starving organism.

Life nourishes life, cell rebuilds cell, and the life of all cells is the circulating, vivifying fluid, the sap in the tree, the blood in the animal. Plants transmute crude inorganic matter into organic forms; animals take up vegetable organisms and advance them to a higher stage. Each advance is an intensification, a rise in the vital scale, a further refinement of cell structure and cell function.

Bovinine quickly and permanently restores the broken constitution of the consumptive by supplying the vitalized protoplasm, living cells, ready for instant appropriation, without taxing the digestive system. It builds up the demoralized system by furnishing the ready-prepared pabulum, and by resting them, restores the digestive and assimilative functions. The victims of consumption starve because the vital organs tire out and give up the struggle, surrendering to the forces that disintegrate and destroy.

Bovinine bases it claims wholly on its direct and positive influence in restoring vital tone, flesh and strength to the debilitated system. It begins at the foundation by restoring the blood. It supplies the shattered and wasted organism with exactly what it must have in order to recuperate, and supplies it in a form that is immediately available.

I have used aletris cordial, Rio, for menorrhagia and dysmenorrhea, and find it an invaluable remedy as a uterine tonic The aletris cordial, Rio, has for a number of years been a great favorite with me in derangement of the female reproductive organs, therefore I recommend it as a tonic in uterine troubles, as it will give satisfaction to those afflicted with such diseases.—C. A. Goshen, M. D., Petaluma, Cal.

WITH THE EDITOR

A Few Personal Remarks.

A very pleasant feature about conducting the Recorder is the many letters I receive from physicians expressing appreciation of the magazine. The Recorder is an independent medical magazine published by a doctor for doctors and is not published in the interest of any drug house, manufacturing concern, medical college or medical society. It is not published to boost along anybody's business but to help the doctor in his daily work. Of course I cannot publish a magazine which will suit everybody any more than you as a physician can suit every individual in your community. However, it is surprising to note how few subscribers drop the magazine and how general the renewals are. That reminds me, if your renewai is due now is a good time to send along your dollar and you will get another thousand of those premium labels. And when you send along your renewal please write what you wish printed on your labels very distinctly. Several hundred doctors will receive samples of this issue of the Recorder and to those who subscribe I wish to say the same. Hundreds of orders are received so carelessly written that it is hard to tell just what is wanted on the labels. Sometimes the name and address are written so that it is impossible to decipher them accurately. Then the subscription clerk consults the medical directory. Perhaps the name is not right there for the same reason. Not infrequently a subscription comes in with order to print labels like enclosed card or label. That's an excellent idea to send a printed card or label providing you do send it. But many times the card or label is not enclosed, then I print the doctor's name and address on the label. Perhaps in a few days the complaint comes that labels were not printed as orderd. The subscriber who did not write his name distinct enough for the printer to read it complains because his name is spelled wrongly. Whose fault is it? Perhaps you say, write and find out if you are not sure. The Recorder is growing to such size that it would pretty nearly keep an extra clerk busy at it. It is a pretty liberal proposition to give a thousand labels as a premium without being obliged to hire a clerk to find out the correct copy. I hope that those who read this will make it a point to give careful attention to making their addresses out distinctly. If the order is properly and legibly made out and the labels are not priuted correctly you get another thousand if you make it known. If your name is written as illegibly as some celebrated financier, the best that can be done is to consult the directory and take the name as it appears there. The Recorder is booming these days, new subscribers coming every day, new "ads," and everything else to make a publisher happy and the only annoyance connected with the whole business is that which is mentioned above.

The morphine habit is one of the dreadful curses of the land which is increasing. I have recently received numerous letters asking for a successful method of treating the habit. The following letter is a specimen of those received:

I hereby remit you one dollar for Medical Recorder one year, and 1,000 labels. I would suggest to you to give us the best known treatment for morphinomania sometime during the year. I have been treating that mania for several years at my home. I treat it by gradual reduction, and have a couple of cases at present that I can reduce to one-eigth of a grain twice in twenty-four hours, and if I go below that amount they go into something bordering on collapse. It makes no difierence what I substitute in the

place of the morphine. It may be that you can help me out with those cases. Both are females, aged 27 and 41 years, I can find no organic disease in either.

Hyoscine is giving some excellent results in the hands of a good many physicians. The Recorder must have a good many readers who have had some valuable experience in treating the habit and I hope such will write me for publication their methods. It may be the means of enabling brother physicians to help many poor souls out of a veritable hell on earth for themselves and their friends. Dr. W. E. Nichols' article in the August number on this subject was greatly appreciated. No extra numbers are now left so that those not fortunate enough to have a copy must hope that Dr. Nichols will write something more on the subject. I have just received the following from Dr. Nichols.

I wrote you an article for August Recorder on Drug Habit. Wish you would state that I have received about 200 letters so far in regard to treatment, and have answered about 50 so far, and am answering them just as fast as possible, but every mail brings from 3 to 18 letters more and as I am a very busy man I can only answer a few every day, but will answer them all. Some may be slow so kindly bear and have patience with me.

I am very suspicious of the many investment schemes now being offered to the public. I have made it a rule to refuse to accept the advertisements of such companies and have refused many pages of such advertising, especially mining propositions. I have looked into a number of such schemes, which may be all right, but I could not assure myself that they were good speculations. However, I have admitted the Motzorongo Co., because I believe, after a careful investigation, that this company is all right. I do not believe in most of the Mexican plantation schemes now in operation but the Motzorongo is entirely different. There is no watered stock, also no high salaried directors. The only officers who receive any salary are the secretary and plantation manager. Every stockholder shares in the benefits of the company.

I believe this company is honestly conducted and offers a good place to invest a little money. However, don't take my word for it. Look it up thoroughly for yourself.

A few of the leading articles in Suggestion for September are "Auto-Suggestion in Mental Troubles," by H. A. Parkyn, M. D.; "Practical Use of Telepathy," by Ella W. Price; "Suggestion in Dentistry," by Mary Frazee; "Faith and Fakirs," by C. A. Hurd, M. D.; "The Finsen Light Cure," by E. E. Carey. Sample copy of Suggestion free. Address 4074 Drexel Boulevard, Chicago.

The September number of the Household-Ledger is an excellent issue of this home magazine. Stories, pictures, music, household departments and helpful hints make this a delightful ladies' magazine.

BRIEF MENTION.

Lanikol cures many skin diseases. Sample free.

Ichthyol is an excellent application in atrophic rhinitis.

Dr. Becker's compound digest cures indigestion. Samples free.

Calicolo cures tuberbculosis. Write to the Butler Positive Treatment Co., San Diego Cal., for evidence.

Perhaps you need a new sign or some sign letters. If so it will pay you to write to Geo. Steere, 256 Clark St , Chicago.

A valuable remedy in treating tuberculosis is triacol. Literature and samples are yours for the asking. Address The Alpers Chemical Co., 4 & 6 White St., New York.

You can cure your hernia cases by the Ideal method. Write the Ideal Chemical Co., St. Paul, Minn. about it. Their method is a success.

Keep your knives and razors sharp. The dry hone made by E. A. Harrington, Waukesha, Wis., keeps them sharp forevermore. Investigate it.

Dr. John Aulde, 1013 Arch St., Philadelphia, has some interesting booklets on advanced therapeutics. They are well worth dropping a line for.

Chemical lymph is proving very successful in curing many obstinate diseases. The Chemical Lymph Co., 1135 Broadway, New York will gladly tell you all about it.

I have used sanmetto in enlargement of the prostate, suppression of urine and chronic inflammation of the bladder, and can recommend its use for any and all the troubles of the urinary tract.—J. A. Wilson, M. D., Columbus, Ohio.

This number contains a number of references to the successful treatment of tuberculosis. A large per cent. of the cases can be cured. Remedies mentioned in the advertising pages of the Recorder cure many cases. Look over these "ads.", get samples of the remedies, and you will never regret it.

Suprarenal extract in some form is a very necessary therapeutic agent in modern practice. Suprarenalin solution made by Armour & Co., Chicago, is a very satisfactory preparation. It contains the active constituent of suprarenal glands. We have given it a very extensive trial and have found that it keeps well and is very reliable.

A pound of radium, uncontrolled, would annihilate the earth. It is believed that the discovery of radium will answer the question "what is electricity?"; lead to the production of light without heat; solve the puzzle of the Aurora; how to make gold; open up communication between planet and planet, and determine how the world will ultimately be destroyed.—Everybody's Magazine.

The sixteenth annual meeting of the American Association of Orifical Surgeons was held in Chicago Sept. 9 to 10, 1903, with quite a goodly attendance of those physicians and surgeons who believe in the doctrine of reflex irritation and who recognize the influence of the sympathetic system. Many papers of special interest were read, the program including such men as Byron Robinson, E. H. Pratt, Henry Caldrich, W. E. Bloyer, R. St. J. Perry, P. S. Replogle and the younger Streeter, of Chicago. The officers elected for 1904 are: President, Ralph St. J. Perry, M. D., of Farmington, Minn.; secretary, F. W. Range, M. D., of Roseville, Ill.; treasurer, T. E. Cortain, M. D., of Chicago, Ill.

The Wisconsin Medical Recorder.

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LEADING ORIGINAL ARTICLES.

PRACTICAL ELECTIVE SURGERY FOR THE GENERAL PRACTITIONER.

By Charles C. Miller, M. D., 100 State Street, Chicago, Ill.

(Continued from page 281, Sept. Recorder.)

STIMULANTS.

We are not entirely in harmony, as to the best way to stimulate a patient suffering from surgical shock, and as to the best drugs to be used. Digitalis, strychnine, atropine, strophanthus, alcohol, ether and many others have had their praises sung and then condemned in turn. Physiological doses of the first will prove valuable if we have sufficient time to secure its effect. Atropine may also be of use. Strychnine, which has long headed the list in popular favor has recently been condemned as worse than useless.

POST OPERATIVE CARE.

This has been decidedly simplified during the last few years. Rest and quiet are most important. It is not to be thought that a patient rests best by keeping him in one position for several days following the operation. Formerly patients were kept strictly upon the back from three to six days after an abdominal section, but a majority of us have abandoned this. Our patients are turned at intervals upon one side or the other. We now too begin propping up our patients in a majority of instances, a few days following even intra-abdominal operations. The fear of hernia through our incision is not felt so long as no suppuration occurs. In other operations, the operator will find that he can allow his patient some freedom along these lines, and make the confinement less irksome, and at the same time prevent the patient becoming weak from the long continuance of the recumbent posture.

DIET.

The patient will be given only liquid diet for about three days following an operation of any importance. After this time if the temperature is down he can be quickly put upon a liberal nutritious diet.

The patient in being prepared for an operation has had a full bath and the bowels cleansed out by frequent small doses of purgatives. Owing to this no bowel movement need be expected for three days. Then we can administer any of the purgatives, which are not likely to disorder the stomach.

INFECTIONS.

OPERATIONS IN THE PRESENCE OF PUS.

This will be necessary in some cases, and as a result a few words must be added as to how to deal with pus already present before operation. We of course will take the same precautions in preparing the patient as though we were to deal with absolutely clean parts. When pus is reached it must be removed without soiling if possible any of the wound surfaces uninfected. Aspiration of an abscess may make it possible to open the cavity without soiling the wound margins. As soon as the abscess has been opened, active antiseptics should be used. Pure carbolic acid can be mopped over the surface of the cavity, and this followed by alcohol to neutralize it. Other antiseptics may be used as well, or in preferance.

SAPREMIA.

In case we have an infection the inflammatory reaction may prevent constitutional disturbance of a decided nature. If the products of decomposition, or of the bacteria present in the wound, are absorbed, we will have a condition which has been termed sapremia. This condition is to be treated by thorough cleansing of the wound, and the removal of blood clots or accumulated pus. The result will be a rapid fall of the temperature and the disappearance of the constitutional symptoms. Drainage and antiseptic dressings will now as a rule, prevent any further difficulty from constitutional symptoms.

SEPTICEMIA.

This is a much more serious condition than the septic intoxication just described, as in this case we cannot as a rule check the process so readily.

In this latter process we have a constitutional infection, and the bacteria proliferating in the tissues of the patient, rather than in the wound secretions. Here symptoms are due to the activity of the bacteria in the tissues as we can see such cases following the slightest wound, which cannot be the case in a sapremia.

The parts about the point of infection are red and swollen and very painful. The wound sloughs in many instances, when it is of any size. The patient suffers a gradual rise of temperature over the period of several days, it becoming high, with rapid pulse and marked constitutional depression.

Treatment must be directed toward checking the growth of bacteria in the wound, and at the same time the vital powers of the patient must be closely watched, and supported from the start. The exact duration of the process and its severity will be problematical.

Antispetics used must be active. Bichlorid, carbolic, creolin, formalin solution or an agent known to be active must be chosen. For supporting the constitution of the patient various stimulants (alcoholics are in high favor with many) and a nutritious liquid diet are called for.

PYEMIA.

In this condition we have a fatal septicemia, and upon post-mortem abscesses are found distant from the point of infection. By a careful study of the case it may be possible to differentiate before death between septicemia and pyemia, but in as much as the treatment is the same and a fatal result inevitable in the latter disease differentiation is only of importance in the forming of a prognosis. This is to be very guarded in any infection, which seems to be of a constitutional nature.

The few preceding paragraphs will serve to remind the physician of the

possibilities of infection, and the importance of prevention. Erysipelas, tetanus, and other infections are also possible.

SOME GENERAL PRINCIPLES IN TECHNIC.

In the private house there will be only a limited number of assistants. We must then learn to use as few instruments as possible. Of course the operator must not be foolish and deprive himself of necessary instruments.

Always place the instruments upon a table, which has been covered with sterile towels. Each instrument or each kind of instrument should have a particular place upon the table in all operations. Select for instance the center for the knives, and in all operations place them there in regular order. Place the scissors say to the right and hemostats to the left, and in no case vary from this arrangement. Soon it will become a habit to place each instrument in its place. The result will be the saving of time and the prevention of an excited search for an instrument during the crisis in an operation.

Needles should be carefuly arranged in order and some of them armed with suture material. They should have their places and be sufficiently far apart that one can be picked up at a time.

Wherever possible a straight needle should be used in suturing as it will be found more readily handled than the half curved, which latter should be given the preference over the full curved when possible.

Avoid complicated needle holders, especially those which are set free by pressing a button on the shaft of the instrument, as almost invariably, when under a most difficult part of the operation and under a strain, if an attempt be made to pass a suture under circumstances not too easy, almost as a rule we will free the needle by inadvertently pressing the button.

Carefully discard hemostats or clamps which lock imperfectly, as it is most disconcerting to have them unlock or fail to lock at critical times.

Find out or decide beforehand as to the kind of suture or ligature material to be used, and avoid a great mass of various kinds and sizes.

Curved instruments should be placed with convexity up as they are, as a rule, more easily picked up under such circumstances.

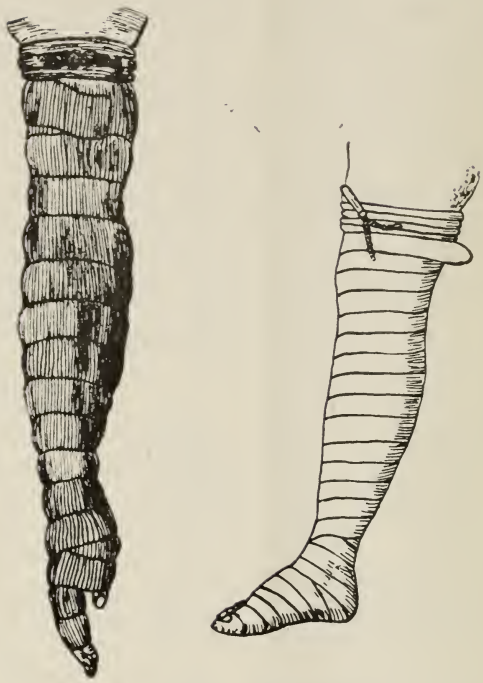
Many other little details will serve to assist a man in doing his work with a minimum effort in the shortest time, and as time is valuable in many instances, these details are not to be neglected.

HEMORRHAGE.

Before any man will attempt to operate on any case he must know how to control hemorrhage. This is the fear of many in considering various operations, and nothing does more to prevent capable men from operating than this fear.

THE ELASTIC BANDAGE.

Before operating on an extremity we can prevent any bleeding by bandaging tightly above the point of operation. This is not to be forgotten. Even the hip joint operation can be rendered bloodless by the rubber cord held against the body by transfixion pins. In the same way we control the circulation by temporary ligature of the vessel going to a part operated upon. This is particularly useful in the neck. It is very easy to find a large vessel like the carotid. Its distinct pulsations make a certain guide to it. A temporary ligature will permit of bloodless operations upon face and neck. The ligature in such a case is not tied as a rule but merely looped around the common carotid and the lumen closed by traction upon the ligature.



FIGS. 1 AND 2.

Figs. 1 and 2 illustrate the use of the elastic bandage for securing a bloodless field. These bandages are applied to the limb from below up. The bandage is then gradually removed in the same manner until only a few turns remain constricting the limb above. The bandage is then secured in place at this point and the operation below can be done without any hemorrhage to interfere with the work.

Nothing is more disconcerting to the beginner during operations, than even ordinary bleeding, and when possible I would advise in earlier operations, that advantage be taken of this method.

When the operation is completed, the open vessls, which can be seen, are caught and tied, then the bandage can be loosened and bleeding points caught. As the bandage is gradually loosened, the smaller vessels can be caught in turn and tied.

In the absence of the rubber bandage, the limb can be elevated and the blood allowed to flow out by gravity, then a rubber cord can be applied above the site of the operation.

The intelligent use of the elastic bondage and constriction will not be followed by any unpleasant after effects.

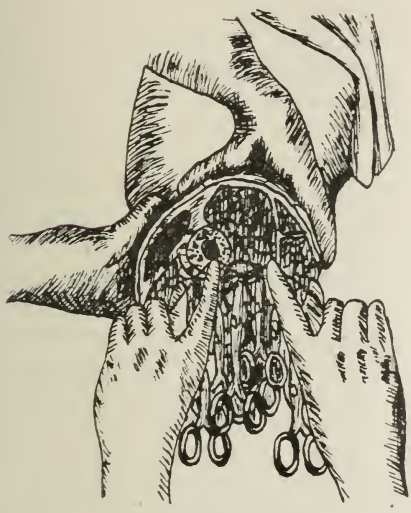


FIG. 3.

Fig. 3 shows nicely the value of hemostats. These instruments are snapped upon bleeding points during the operation. They lock when closed and then are allowed to hang until the cutting is completed, or until they finally get in the way of the operator. Then they are removed, and in most cases no hemorrhage follows from the point, which immediately after the incision bled freely. If the vessel has been a large one it may be necessary to tie it, as is illustrated in the cut.

These instruments are particularly useful to the young operator, as they give him a feeling of security. While it is well for the operator to have plenty of hemostats on hand ready for use, I would advise one to learn to disrespect slight hemorrhages in ordinary operations, as much time can be wasted dealing with a hemorrhage which really needs no attention. The operator is thus afraid to attack more important surgical lesions, thinking that he would be unable to cope with the greater hemorrhage and other difficulties.

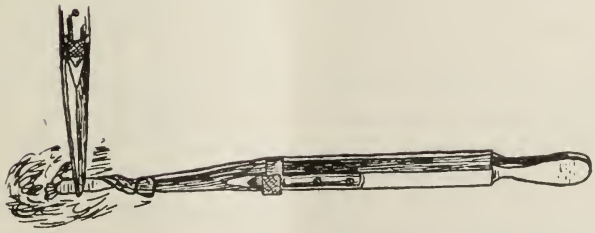


FIG. 4.

Fig. 4 shows method of applying torsion, when a large vessel is to be twisted. In the absence of absorbable ligature material it can be safely applied, to advantage at the present day. Very large vessels, such as the femoral artery, have been occluded by this method.

HEMOSTATIC FORCEPS.

In an operation at the present day hemostats will prove most useful in controlling hemorrhage. A number of these at hand and snapped on bleeding points will control all bleeding. Spurters clamped shut for a few minutes can be released and no further bleeding occur from them. If the vessel is of considerable size a ligature will be required. Catgut should always be chosen for this purpose, and if the vessels are so situated as not to be closely surrounded by tissues, it is well to use the chromicized. Number one will be sufficiently large, unless we are ligating large vessels inside the abdomen. In some instances the very large vessels, connected with intra-abdominal tumors are as a precaution ligated with silk.

THE TENACULUM.

In our work we should not forget that the old method of controlling hemorrhage, consisted in catching the tissues or the vessel itself with a tenaculum and drawing out a projecting cone which was ligated.

TORSION.

Torsion too was formerly in great favor. The vessel if large was drawn out and twisted, or the tissues containing a vessel were so treated and in this way the lumen occluded. This method will prove of utility in doing small operations, where we are anxious to avoid burying any ligatures in the wound.

Regular torsion forceps were formerly used in applying this method of hemostasis. At the present day ordinary tissue forceps or hemostats are used. Very large vessels can be occluded by this method if properly carried out.

(To be continued.)

THE DOCTOR HIMSELF AND A FEW OTHER THINGS.

By F. F. Casseday, Ph.B., M. D., Rosemount, Minn.

There are a lot of mighty poor doctors in the world. As none of this class will in all probability ever read this article we can discuss the matter confidentially among ourselves. There are two principal classes of poor doctors (poor used in the sense of inefficient), one class who get into lots of trouble like the parrot by talking too much; the other who get a temporary reputation for wisdom by keeping quiet, until some bright person discovers that their reticence is simply a mask for stupidity. As the average doctor is not receptive of new ideas after reaching the age of fifty years, or does not need them in his business, we will state here that this short sermon is intended principally for the young doctors just beginning practice, and for those, who do not feel hurt over the expounding of old truths in a new dress.

Some of the young doctors have a proper degree of humility when they begin practice, others believe the world is waiting for them with wide open arms. Both sorts get lots of hard jars. It does them both good. It is a great thing to sit down sometimes and view the world from the other fellow's standpoint. It does the doctor a heap of good, and often secures the world better value for his money.

Given a bright young man just starting in private practice. He is fairly well equipped in a professional way. He is honest. He is willing to learn. All he wants is a chance. The public looks him over carefully, tries him cautiously, and then the harpoons begin to fly. This is the crucial point in his career. This is the period when he either makes or unmakes himself as far as that particular community is

concerned. If he allows himself to be unduly depressed over his inability to hold all the patients, who come to him, or if he loses his temper and talks too much when discharged from a case and another doctor is called, he will make a blunder, which may be difficult to repair. If on the other hand he is too highly elated over the issue of a successful case and boasts over much he may lose the respect of some persons of mature judgment, whose verdict is needful for his highest success. In either case he will strike twelve early in his career, or become a life insurance agent.

The timid man is too apt to feel when meeting with a rebuff, whether merited or unmerited, that his friends have all deserted him in his extremity. Never fear. You will have friends you know not of. Remember that the love of fair play is inherent in the human race. If you keep your temper and your head you will win out, provided of course you understand your business.

Do not be discouraged because you make mistakes. The man or woman does not live, who never made a mistake. They are all dead. The point is not to never make a mistake, but to never make the same mistake a second time. Most doctors learn more from their mistakes and failures than from their successful cases. Mistakes and failures promote study and investigation. Success sometimes produces self sufficiency, which may end in dry rot.

The people have been faked so much that they want a medical man on probation. The people appreciate honest, thoughtful, careful, physicians, who display good judgment, and avoid rashness. Demonstrate that you possess these qualities and the patients will come to stay.

Decision of character is the most necessary qualification. It is your lot to be brought face to face, every day and any hour, with desperate conditions which demand quick decision and prompt action. The doctor who dilly-dallys or wavers is lost. Do something and do it quickly, map out your campaign in your mind, and marshal your forces like a competent general on the field of battle. Control yourself to calm movement and work, under the most trying circumstances, and whatever the result of the case in hand may be, the verdict of the majority of onlookers, whose opinion is worth anything, will always be that such a physician is all right. Encourage the fearful and timid members of the household where there is sickness, and drive the rash ones to work, carry hopefulness and good cheer, and make your statements and orders concise, firm, and to the point. When you make a diagnosis stick to it through thick and thin; if you find other conditions change your treatment to conform and say nothing.

Do not be discouraged because you are discharged from a case. Take your medicine cheerfully. Impress upon the patient that all you desire is his welfare and recovery. Bid him good bye cordially and pleasantly, and tell him your services are at his disposal if ever required. The result is that the patient is your friend, and he will be after you another time. The practice of medicine is a business proposition. Your skill and knowledge are in the market for sale, and you must employ rational means to get a chance to use them where they will bring you returns. Other things being equal the sweet tempered men or women among doctors, who keep their temper and carry no chips on their shoulders, are the ones who get the business. The doctor who thinks he has a string tied to his patients consciously or unconsciously gives out that impression, and the consequence is a great deal of kicking over the traces and many runaways.

Do not stress the financial end of the profession to the breaking point. Charge a fair price for your services, and insist on reasonably prompt payment from those able to pay. Take care of God's poor cheerfully and without price. Turn over the devil's poor to his satanic majesty. Beware of the good fellow who offers to pay you in recommendations to his friends. It will not buy shoes or food for the baby. Strike a happy mean on the fee proposition. Do not hold up the rich man or the well-to-do man and expect him to pay for the poor man. That is neither fair nor honest. Look out for the beat, who is able to pay and never has the price. He will take anything from a ham sandwich to a house and lot if he gets it for nothing. Remember also that the man who fails to pay and runs away may need a doctor another day. Then your turn comes. Turn him over to some of your competitors, who have criticised you harshly. Many a good man in the medical profession founders on the rock of cheap fees. He establishes a bad precedent for himself, and nilly willy a man is judged in the community largely by the estimate in the way of fees which he places upon himself. If he gives office advice and medicine for two bits and other fees in proportion he will have lots of business such as it is, wear himself out, kill his horses, and have nothing wherewith to educate his children, buy a pretty gown for his dear wife, and provide for a decent and respectable old age. Hammer it into your patients' minds that you charge for your skill and knowledge and not for your time. Your fee is for knowing how and doing the thing in a skillful manner. Some men and worthy men, too, who have come up from hard manual labor into the medical profession cannot shake off the incubus of the twenty-five cents per hour or three dollars per day proposition. Another thing, a man who slaves and drives for the best years of his life on barely living fees has no time or inclination for study or improvement. He is doing himself and his patients an injustice. Do not be afraid to charge a good stiff fee when it is due you. Simply name your price and make no comments. Do not feel sorry for the other fellow. Think about yourself and the wife and babies. As a physician gains experience and skill and knowledge he should gradually raise his fees all along the line. In that way he keeps and increases his net returns and gains more time for reading and study. This increases the value of his services to the public not merely in money count but actually in better results. A cheap doctor is a slave all his life, and he never grows. He cannot do it in the nature of things. He is his own worst enemy, and the sad part of it is that he is totally unconscious of it. Develop, grow, keep in touch with the best there is in medical knowledge, and your services will always be in demand. Skill and knowledge always have and always will command a good price as long as the world stands. Charge a good fee, but do good work. Give value received. Don't skimp your work. Be honest and thorough.

Take a post graduate course every now and then. Go to Europe. Broaden out and see how the other doctor does it. Go fishing. Go away once in a while and give your patients a chance to get well. Perhaps you have heard the story about the country doctor. The old duffer sent for a specialist to operate for him. When about ready the surgeon told the old duffer to clean his hands in good shape and put on his gown and be ready to assist him. "Oh I am all ready" responded O. D. "My hands are clean; I washed them before I left home." Ye gods think of that and weep! That was a twenty-five cent doctor, the news about

sepsis and antisepsis had never touched him. If a woman died of sepsis after child birth in his hands he laid it to divine providence, and remarked like the negro baptist preacher when his baptismal charge slipped away in the river under the ice, "now let another."

It is an absolute misfortune for a young doctor to start in practice as assistant to an older man. He always looks for help and he contracts the prop habit. It stays with him all his life. It is the bane of his existence. He is never dead sure of anything except that he don't just exactly know, don't you know. Every young man should cut loose and run for the country. Get in a small place in a good farming country as far away from any other doctor as possible, and pitch in to win. Buy a standard outfit for practical all around work and nail your flag to the mast. Learn to use what you have and make it do. When you get into a hole you will learn to dig yourself out, and the digging out process will be the best thing that ever happened to you. It will sharpen your wits to the cutting point, and make a rattling good doctor out of you, or a dismal failure. If you belong to the latter class the sooner you find it out the better. If you love your profession it will be the happiest part of your life, and I want to tell you, Rufus, that the country doctor of today, the real, wide awake, up-to-date country doctor, is the real thing, and he can give many of the city chaps cards and spades and beat them at that. Make no mistake. Do not let anyone make you believe that medical knowledge stops at the city limits, because forsooth some of the best of us practice in the country. We came to the country for what there was in it and for the benefit of our health and we are glad to report that we have found both. There is no lock and key or copyright on medical knowledge and skill, and a man can read, and think and experiment in the country better than in the city. The air is better, and it is quiet, and the stone pavements don't hurt his feet and he don't get round shouldered riding in the street cars, or wry neck from looking over his shoulders at the office door for the patients, who never come, like his dear professional city brother.

Many a country doctor has amputated a leg with a butcher knife and buck saw before now and got a good result. I have a friend—a medical friend living a few miles down the pike, who says as long as he can live well in the country and add a slice to his bank account every year it is not half so bad. $5,000 a year sounds well now, don't it? Surely it does. $3,000 a year sounds good too, especially when you can save one-third of it every year in the country. How much do they save out of the $5,000 yearly in the city? Not much my son, verily not much if you warm up to them and have a heart to heart talk. Then too lots of the country boys make $6,000 and more a year, they surely do, as their farms and fat stock testify. In these days of telephones and rural mail, country people are coming to the front, and they are just as much entitled to first class modern medical and surgical treatment from A. No. 1. doctors as the city folks, and they are getting it.

Come over into the promised land, and grow with us.

Dr. John B. Rich of New York City, who is 94 years of age, recently gave an address on how to live 100 years in which he said: "Be good-natured; be clean; exercise; be comfortable; sleep in the most comfortable bed you can get; don't eat twice as much as you need, and don't eat food that will abuse that poor old muscle, the human stomach."

A VALUABLE IMPROVEMENT IN THE TREATMENT OF DISEASES OF THE MALE URETHRA.

By T. W. Williams, M. D., Milwaukee, Wis.

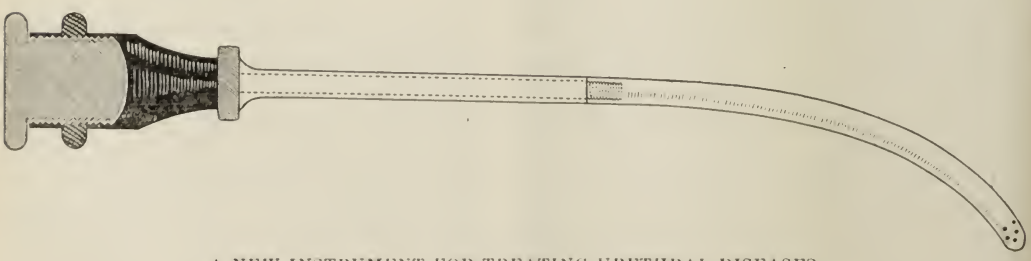
A NEW INSTRUMENT FOR TREATING URETHRAL DISEASES.

The paucity of suitable surgical appliances for treating the male urethra has always been a serious obstacle to the genito-urinary specialist. Since Lallemand brought his porte caustique to the attention of the profession in 1836, there has been little substantial improvement along this line. One serious objection to the application of solid silver nitrate to the ejaculatory ducts and colliculus seminalis is that unless great care is exercised, it is liable to make too deep a burn, leaving a scar which results in the formation of cicatricial tissue. This accident produces a patulous condition of the ducts, aggravating, rather than removing spermatorrhea.

For the past eighteen years the writer, although he has not discarded the porte caustique altogether, has met with very few cases in which the ointment of pernitrate of mercury, U. S. P., has not given equally as good, if not better results, without the disadvantages of nitrate silver. He attributes this to the fact that the oleaginous nature of the preparation limits its caustic action to the surface of the tissues, which are usually, as shown by the endoscope, in a hyperaemic, swollen or granular condition. By thus acting upon the surface of the engorged tissue, its morbid irritablity is changed, and a healthy contraction excited in it which causes it to empty itself, become paler, and retain a tonic, energetic action until its normal condition is restored by subsequent soothing, healing and astringent applications.

I commenced using the pernitrate as a local antiphlogistic and cauterant about 1882. I contributed an article to the Therapeutic Gazette, June 1885, recommending it for this purpose and for prostatic diseases. At that time and until recently I used Lallemand's porte caustique for making the application, by filling the cup with ointment instead of with fused nitrate silver. The principal objection to the porte caustique for this purpose is that it does not hold a sufficient quantity of the ointment for the various purposes of such an instrument.

More recently, however, I devised a urethral applicateur which I have not only found very much better for this purpose, but also for treating disease of the urethra generally, and enabling us to make any kind of medicinal application to that canal as readily as if it were an external membrane.



A NEW INSTRUMENT FOR TREATING URETHRAL DISEASES.

This instrument consists of a silver (or heavily plated) catheter stem, about seven inches long, closed at the distal extremity, and perforated with $\frac{1}{32}$ holes, which screws into a hard rubber reservoir, or cup to contain the medicament. A hard-rubber plunger screws into the top of the reservoir and forces the ointment through the catheter. It is introduced into the urethra as far back as the neck of the bladder, so as to cover the prostatic, or deep urethra and colliculus seminalis. While steadying the instrument with the thumb and fore finger of the left hand on the projecting rim of the reservoir, the physician by making a turn of the screw plunger, causes the extrusion of the medicament. The instrument is turned around in the canal once or twice to spread the ointment before withdrawing it. Cauterant, antiphlogistic, analgesic and astringent applications in the form of ointment, are readily applied to the the colliculus seminalis and deep urethra, in chronic urethritis, stricture, gleet, spermatorrhea, premature emissio seminis in coitus, dribbling of urine from loss of contractility of the canal, prostatitis, etc. For cauterizing the ejaculatory ducts and caput gallinaginis, it is preferable to Lallemand's porte caustique. Acute gonorrhea and non-specific urethritis can be most effectively treated by first deadening the sensitiveness of the canal by injecting a few drops of a one or two per cent. solution of eucaine (Beta) or cocaine, then passing the catheter stem, anointed with carbolized sweet oil, down to the prostate, and extruding the medicament as the instrument is slowly withdrawn, thus spreading it over the entire urethral surface. This not only brings it in contact with every part of the affected membrane, for a longer time than injections, but keeps the inflamed, granulated, mattering surfaces separated,—a sine qua non in facilitating the healing process.

The applicateur gives much better results in urethral disease than injections or crayons; we can accomplish more in chronic cases in three or four weeks, than we can by the ordinary methods in vogue in as many months. It affords a wide choice of remedial agents. There is scarcely any cauterant, antphlogistic, analgesic, astringent, stimulant or healing application that we cannot administer to the uretha as readily as if it were situated externally. Ung. hydrarg. nitrat., (preferable as a cauterant to nitrate silver,) ung. hydrag., oxide zinc, subnitrate bismuth, bole Armenian, (supposed to be the basis of "Injection Brou," and to act by depositing an astringent earthy sediment on the canal which keeps its folds separated,) hydrastis, cocaine, morphia, sulph. zinc, adrenalin chloride, (1. 1.000) aristol, iodoform, iodine, salol, icthyol, airol, protargol,—in fact any and all of the ingredients usually employed in the numerous urethral crayons on the market, can be more effectually and safely applied with this instrument in the form of ointments, using lanum (Merck) and olive oil, ¾ of the former to ¼ of the later, as a vehicle, the adhesiveness of which retains the remedy in direct contact with the diseased membrane for a long time, during which the latter is separated and distended, affording the best opportunity for the exercise of its gonococcicide properties.

Lavage of the urethra with water as hot as it can be borne, impregnated with some mild antiseptic, before using the applicateur, is good practice, especially in acute cases. The deeper creases and mucous cavities are thus thoroughly cleansed and the ointment has a more direct action. For this purpose resinol or zarcol soap answers well. The catheter stem of the applicateur, attached to a rubber bulb, makes a good syringe for the urethral lavage. Fill the bulb, pass the stem

down to the neck of the bladder, and slowly inject the water which wells up around the stem and flows out at the meatus. Repeat the operation several times. Avoid injecting the bladder, but should some of the fluid enter it, it will do no particular harm; there is however, no danger of this, unless the stem is carried too deep.

I will add a few approved formulas of the different ointments which I have found best adapted for the purposes indicated.

FORMULAS.

NO. 1.

℞ Ung. hydrarg. nitrat. U.S.P., ℥j
Cocaine, gr.ij
Morphia sulph., gr.ij

Mix and rub together thoroughly in a glass mortar. Preferable to nitrate silver as a cauterant of the ejaculatory ducts and colliculus seminalis in spermatorrhea, impotence and chronic urethritis, with premature emission in coitus, dribbling of urine, frequent desire to urinate, etc.

NO. 2.

℞ Resinol ointment, ʒj
Hydrastine hydrochlorate (Merck), gr.ij
Morphia sulphas, gr.ij

Mix.

NO. 3.

℞ Aseptinol ointment, ʒj
Eucaine (Beta), gr.ij
Bismuth subgallate, gr.iv

Mix.

Nos. 2 and 3 are useful adjuvants to follow, or alternate with No. 1.

NO. 4.

℞ Beechwood creosote, ʒss
Lanum (Merck), ʒvj
Olive oil, ʒij
Morphia sulphate, gr.ij

Mix. In gleet, urethral ulcers and chronic urethral troubles.

NO. 5.

℞ Ung. hydrarg. U.S.P., ʒss
Ung. bismuth oxid., U.S.P., ʒss
Morphia sulp., gr.ij

Mix. In gonorrhea and gleet.

NO. 6.

℞ Fl. ext., belladonna, ʒss
Fl. ext. hyoscyamus, ʒss
Olive oil, ʒij
Lanum (Merck), ʒvj

Mix. In chordee, tenesmus urina, and dysuria.

NO. 7.

℞ Iodine, gr.xx
Alcohol, ʒss
Glycerine, ʒij
Lanum (Merck), ʒj

Rub the iodine first with the alcoho and glycerine, and then with the wool fat until thoroughly mixed.

In hypertrophy of the prostate, as a resolvent.

NO. 8.

℞ Pyoktanin (Blue), gr.x
Lanum (Merck), ʒvj
Olive oil, ʒij

Mix. In acute and sub-acute gonorrhea.

NO. 9.

℞ Largin (Merck), gr.xx to xxx
Lanum (Merck), ʒvj
Olive oil, ʒij

Mix. Twice daily in acute and subacute gonorrhea.

NO. 10.

℞ Icthargan (Merck), gr.ss
Glycerine, ʒij
Lanum (Merck), ʒvj

Mix. Same as 8 and 9.

These three last ointments should not be exposed to the light.

NO. 11.

℞ Zinc sulphate, gr.ij
Lead actate, gr.iv
Bole Armenian, gr.viij
Morphia sulph., gr.ij
Glycerine, ʒij
Lanum (Merck), ʒvj

Mix. An excellent application in sub-acute gonorrhea, after subsidence of the inflammatory stage, twice daily.

NO. 12.

℞ Thiosinamine (Merck), gr.xx
Ether, sulphuric, q.s.
Glycerine, ʒij
Lanum (Merck), ʒvj

Add sufficient ether to the thiosinamine to dissolve it, and rub with the glycerine and purified wool fat until thoroughly mixed.

Used as a local application every two or three days, as a resolvent in stricture and hypertrophy of the prostate gland.

For the convenience of the physician, it is recommended that a half dozen or more urethral applicateurs, charged with the preparations most used, properly numbered, be kept at hand to avoid loss of time and trouble in cleaning and recharging, which is necessary when only one or two instruments are at hand. One catheter stem, however, can be used with several cups, as it is made in two pieces, to facilitate cleaning, and has a common thread which fits any reservoir cup.

[Since this article was in type I have received the September number of the Therapeutic Gazette (Detroit), in which Dr. W. H. Whitehead, of Atlanta, Ga., recommends substantially the same method of treatment as above, in an interesting and well written article on "A Rational, Rapid and Efficient Remedy for Gonorrhea." The active ingredients in the doctor's salve are yellow oxide mercury and oxide silver, and in the absence of a more perfect applicator for the purpose, he recommends an "ordinary rubber catheter, with any snipe-nozzle 'P' syringe," the object being to deposit the ointment in the affected part of the canal. He says: "The results of this treatment far surpass anything yet tried by me, and I have tried everything, rational and irrational. Not only is the duration of the disease shortened, but the complications are almost totally eliminated. * * * The salve is painless, all discharge is arrested by a two or three days' use of it and radical cures are often obtained by a dozen applications—six days' treatment."]

PHYSIOLOGY AND PSYCHOLOGY.

By Herman Gasser, M. D., Platteville, Wis.

(Continued from page 284, Sept. Recorder.)

While we have illustrated that the nervous energy which circulates in its system is like all other forms of energy, is characteristic and distinctive only through the forces and mediums that give it expression, nevertheless by following its constructive function as it is interpreted in the unity of our life, feeling and ideas, two new, but related factors come into being; the one, that our life and feeling is a form of energy or force woven out of the nervous energy by the special function of the brain, the other, that life and feeling is not nervous energy per se, that there is no such a thing as a special vital fluid, or a special attenuated and spirited entity of mind, but that life and mind is the continously active state all our bodily functions in their

reactious upon the world of phenomena in the organized unity of expression or system of relations, and as these are ever changing, so our states of life and feeling are in constant transition.

We have only carried the constructive synthesis of nature by analysis, a step higher, but it is still the same force. The nervous energy we know has a great many variations in the form of the special sensations and volitions, but the feeling or idea of them is the organized and related unity of their being. Not any one is sensation or volition, but all of them. The special sensation or volition may appear as an entity in our feeling, our idea, but it is not the special nervous energy that we feel, only the measure of its activity as related to the whole. The former is a unit of energy, the later the system of the unity of force. That they are interdependent and related is beyond all question, for we cannot even conceive of feeling with its ideal states except as woven out of the living functions of the body with all its variations of reaction. The nervous system, liver, lungs, stomach, muscles, eyes and ears, bones and blood in our body are all forms of life, all living cells, because they play a related part in the unity or whole of our bodily life. Indeed we cannot conceive how our life could exist and continue to be without each performing its related part in the general economy.

This physiological division of the unity of life in the special cells and organs from bone to brain, are all special physical expressions of living energy which have none of the distinctive and characteristic qualities that in reality cause them to be known as units of life, or units of mind. They live, grow and reproduce themselves as a related part of the circuit of life, but are so far removed and specialized in its unity that they are only organic living physical timbers in the architecture of the whole, the consensus of which is the measure of its unity of being.

Life with its feelings and ideas is a unity the forces of which it finds in the physical and organized functions of the body. The greater this organization with this specialization, the greater is the life, its unity of related functions, and is the measure of its being from the simple living cell, all the the way up to man. The unit of life only becomes more evolved, created into a higher and more complex existence by building around it an increased physical organization with system and relation to differentiate its unity of living functions, thereby economizing it's special activities, doing the special forms of its work with greater ease and rapidity, that the whole may have a more complete and variable unity. This again shows that life is measured by the organized unity of its functional activities. The greater its capacity to assimilate and react upon the forces of nature with economy and system by the way of the special functions, the greater is its worth.

By following the physical forces in their biological continuity with scientific system as observed in the scheme of natural creation or evolution, wherein we find that each effect has a cause, the laws of which hold good from the highest to the lowest, that it is all a physical unity of nature in which we play a related part with its conservation of energy, wherein nothing is lost or brought into being that is not accounted for in the organizing and constructive unity of its phenomena in the unity of our life with its feelings and ideas, which we have shown is also a form of force and energy, subject to, and dependent upon the same laws of nature, the same conservation of energy that pervales throughout, they must be accounted for with the same scientific, lawful and systematic physical equation.

How is this feeling, mind, or idea, we have of the world, out of which it was woven, and is a related part, expended without reverting back into the simple material physical forces in the form of heat, and waste products of conbustion?

Every volitional and ideal state of life and feeling is an expenditure of physical energy, the conservation of energy holds true here, as in the most simple chemical reaction wherein all the terms are accounted for, with nothing lost or gained, only changed in the unity of its relation. This is the scientific, the physical conclusion to which all our experiences lead us, but we have still a vastly more important and complicated problem staring us in the face. Nature is not only a lawful unity of related physical forces, but it is a constructive idea, a living continuous and organized stream, that is as immortal as the physical forces that has not been accounted for with scientific system in the unity of nature.

What do we mean by the lawful and constructive unity of nature? If it is all only a related unity of physical forces how did the idea, the feeling, ever come into our being that it is a creative unity? While we have shown that this feeling and idea as a form of force, a unity of the measure its being, and by the law of conservation of energy demonstrated that you cannot get something out of nothing, we are forced to the conclusion that our feelings and ideas are forms of force or energy woven with the same lawful system into our being as as the material physical forces that compose our bodies. The architectural forces of the unity of nature that created or evolved them, is the same force that created our feeling and life. This is a scientific axiom the validity of which cannot be questioned, although we may not be able to chase it to a definite system of relation.

If our feelings and ideas are a unity in the unity of nature, then we are a related part of the infinite unity, idea or feeling. The unity of nature and conservation of energy is only our finite idea or unity woven into our orginized and constructive being, the forces of which must in some way be lawfully accounted for. How can we do this, when common experience demonstrates our feelings and ideas in their organized unity of expression are physically expended in the form of force with its conservation of energy.

To illustrate the weakness of a position we must first show it in all its strength and worth. In following our experiences with physical and scientific system, the one and all important fact that looms into being is, that we are a living unit, an idea or or feeling, which our very existence demonstrates is woven out of, and a related part of the infinite unity, idea of creation or evolution. It is here we have the physical explanation of the all important and transcendent phenomenon that has puzzzled the students and thinkers for ages.

The unity of nature is not only a lawful and orderly system of physical forces, it is an organizing, creative and constructive idea. While each reaction, physical and biological, is accounted for in the form of force with its conservation of energy, a part of it is retained, conserved, organized into the creative and constructive idea.

This is why our idea is a related part of the infinite idea. Our life with its feelings and ideas may be mostly expended in the form of physical force, but its very work is being organized in the ideal unity into greater being. To attain the present, we have worked countless ages along the stream of its purpose, its idea. This is the price of our being.

Life is a unity, an individual world, in the world. The measure of its reaction or experience in it, is its ever-

present relation in the world. The world of the simple cell, the worm, fish, or man, is one of degree of action or experience. The unity of life is not any one thing, but everything; it it is the unit of the ever-present system of force; a little world; an idea that is the sum of all our experiences of bodily function with their reactions upon the entire world of phenomena. In reality our bodily functions are purely physical forces, governed by, and subject to the same laws that pervade throughout nature generally. We call our special bodily functions of the lungs, liver, and kidneys, living forces, because they have an organized continuity of activity, but not any one of them is really any more a unit of life than is the air, food or water, upon which they react. They are all only special forces, the consensus of which is woven into the related unity of their activity in life and feeling. The air is as essential to its continuance, as the lungs, the food and water, as the stomach and liver. They are special units of force, while life and feeling is a unity of force, a little world in the great world.

The great world had no existence no reality of being before we were born, as measured by our individual life with its experiences. We came "out of the everywhere into the here." The greater our assimilation of its experiences, the more it becomes unfolded to us in the idea that it has developed and evolved by a regular systematic process, the forces of which are the laws of our creation and heredity, the chain that connects us with the remotest periods in time. In this way we learn that our individual life with its feelings and ideas are not only a related unity, a special creation woven out of the infinite unity, but demonstrates to us the immortal idea of time; that the unity of the creative purpose had been laboring for untold ages to bring about our being; and the same evidence causes us to believe it will continue on through the future after our individual life has run the circuit of its existence. The truth, also, that our individual life is connected with, and woven out of the infinite unity, idea or work of the past, is a demonstration that it will play the same part upon the immortal stream of the future with its increasing worth splendor and beauty.

Notwithstanding all this physical systematization into a scientific world idea with ourselves therein, man is not satisfied; the idea constantly forces itself into being, why was I created? what is the ultimate destiny and purpose of the infinite unity, the work of which is expressed in my finite unity?

In the infinite unity of nature I can understand that my good work will give me health, strength, endurance and happiness; that the forces will be transmitted to posterity to live it with increased vigor and breadth, and thus continue in the immortal physical and constructive future; is full of inspiration, worth and hope; nevertheless it is too remote in its relation to satisfy my ideas with its individual realities and aspirations. For my good work there ought to be a more enduring personal reward, the span of its few years of activity seems as no just compensation for its continued work; have I not given more than I have received? and if the immortal unity and creative idea that gave me being as an individual son and heir, why should I not be rewarded by immortal life? Is not my mortal life a related part of the immortal? Is it purely an idea of selfishness that causes me to work, hope and aspire to this individual realization and purpose, with the only reward of living it in my posterity, with increased growth and strength is all only to make the world idea of creation a little better and greater?

After having exhausted all the sources in the physical and scientific

architecture of the scheme of the creative purpose, it appears that nowhere, in any of its special departments of investigation, is there offered a ray of hope, even an idea that will solve the problem. Indeed, increased knowledge of all the special studies, only binds it to the wheels of system, unity and law with a more inexorable and relentless force to its constructive purpose which we can no more escape than the law of gravitation.

This, however, is not the end, we can still appeal our cause to a higher court. If we have exhausted all the resources of the architecture of creation in nature, which all experience demonstrates is only a constructive phenomenon, as woven into our idea, our unity of it, then our idea of creative architecture is only a phenomenon of the phenomenon, an idea of the idea. It is in this court we must rest our case, is the last resort where we can plead our cause. What does it offer?

(To be continued.)

PHYSICS OF THE X-RAY.

By Dr. Gordon G. Burdick, Chicago, Illinois.

Chief Surgeon Peoples' Hospital; Professor Radio-Therapy and Photo-Chemistry, Illinois School Electro-Therapeutics; Associate Professor Surgery, Post Graduate Medical School; President Chicago Electro-Medical Society.

(Continued from page 288, Sept. Recorder.)

REGULATORS.

These tubes made by Muehler and R. F. universal have a desirable feature that makes it possible to maintain a comparatively regular degree of exhaustion in the tube, and is accomplished by means of a shunt, using a variable resistance of air in the shunt circuit in order to maintain different degrees of vacuum in the tube, a spark passing over the shunt from time to time and driving off more of the gas from the coke as the resistance of the tube increases from the disturbances going on in the tube, causing a spark to take the path of least resistance and pass through the regulator and reduce the resistance in the large tube to normal again. The greater the air gap in the shunt circuit, the greater the resistance of the tube becomes, and the greater the degree of penetration is present, and conversely the less the air-gap, the lower the resistance of the tube, and less the degree of penetration may be obtained under a given amount of electro-motive force.

The Sayen tube made by Queen & Co. has an ideal regulator in principle, but the manufacturers with a lamentable lack of enterprise have neglected to keep their tube in pace with the generating apparatus, and to day it is probably the ideal tube for radiotherapeutic purposes when used with small coils.

This regulator consists of an axillary tube, exhausted to a very low Crooke's vacuum, attached to the large tube. The tube is a perfect X-ray tube, and has its cathode terminal prolonged into an adjustable shunt; which introduces a variable air resistance between the cathode of the small tube, and the cathode of the large one. The position occupied by this shunt will determine the resistance of the large tube when in action.

When this tube is brought into action for the time being the current will pass through the small tube, and jump over the adjustable shunt because the resistance of the small tube plus the variable resistance of the air gap of the shunt is always less than the resistance of the large tube, which is pumped to the hihgest Crooke's vacuum, before the tube is sealed. Tne large tube contains a bulb with caustic potash, which ab-

sorbs the hydrogen corpuscles that remain in the tube bringing about nearly an absolute vacuum when the tube is not in use. The cathode ray of the small tube is brought to a fine focus upon the small target, which is supported by a platinum wire that is prolonged into the large tube through the glass, and terminates into a bulb of caustic potash.

The platinum wire conveys the heat from the small target to the potash, and drives off the moisture it contains, which lowers the vacuum of the large tube, to that of the low small tube plus the size of the shunt; when the current takes the large tube instead of the by path, a spark passes from time to time as the corpuscles are consumed in the large tube, through the small tube which drives off more moisture as required, in order to keep the resistance of the large less than the small one with its shunt.

If we vary the shunt we are able to vary the vacuum of the large tube at will. The closer the shunt wire is to the cathode of the large tube the lower the resistance of the large tube will be, and conversely the greater the air resistance between the shunt wire and the cathode of the large tube, the higher the vacuum will be. Several serious defects in practice have developed. First, care must be observed not to have the shunt wire closer than one inch from the large cathade, or the tube will become a jet black from the combinations formed in the presence of platinum, hydrogen, and oxygen, together with the ionic metal thrown off by the electrodes. The radiating system in this tube is defective, and the anodel target becomes too hot, when used upon a large coil, and more of the energy of the current is transformed into heat, than X-radiance.

The former high vacuum of the large tube is restored after the tube cools, because the caustic potash absorbs the free corpuscles of oxygen and hydrogen that have been driven into the tube, by the regulation, and it may be used again at any degree of exhaustion as may be desired; several accidents have occured with this type of tube, apparently the corpuscles have been driven off in about the right proportion to form an explosive mixture, and the tube has exploded with great violence, fortunately no damage resulting as yet to human life; but it is well to protect both the patient and the operator as a serious accident might occur. Oxygen in a tube is very objectionable, as it is likely to unite with explosive violcnce withthe hydrogen, and promotes the transformation of the current from X-radiance to heat.

There are many regulators depending upon a shunt circuit, not connected with the tube, but having a wire attached to some chemical regulator that has been let iuto the tube. Some of them give a fair degree of satisfaction, but the main difficulty is caused by the regulator either working too much, or taking too much time to restore the tube to its initial high vacuum, before it can be used again.

So far we have confined our attention to the phenomena inside of the tube, and before we consider the forms of energy outside of the tube, it will be necessary to study the laws of energy.

(To be continued.)

CONSULTATION BY MAIL.

By Ralph St. J. Perry, M. D., Farmington, Minnesota.

Lecturer on Dermatology and Genito-Urinary Diseases, University of Minnesota.

Notwithstanding the fact that nearly a quarter of a century has elapsed since the initial promulgation of the idea of "orificial philosophy," the said idea is still a stranger to many brains. This is due partially to the antagonism

of our friends, the enemy, who believe that nothing good can come from a homoeopathic source; it is also partially due to the inertia of those who know of the idea, but who lack the energy to spread the gospel. Others lack the mental capacity to fully grasp the details of the philosophy, and naturally, being unable to explain it when asked to do so, gradually drift away from the "cult" and seek refuge in easier understood principles. Still others, because of an inability to succeed in practice, lose faith.

Quite a number of physicians and surgeons of other schools than the homoeopathic have had their eyes opened, and knowing a good thing when they see it have not hesitated to adopt and practice according to orificial ideas. Bloyer, of Cincinnati, and the late Curryer, of Indianapolis, have done much to draw the attention of the eclectics to orificial surgery. Matthews, of Louisville, and several other rectal surgeons have by their antagonism drawn the attention of the old school practitioners to the philosophy to such an extent that many of them have wondered what this bogie man was, have investigated, and have come to believe in and practice it.

This ignorance, coexisting with a thirst for knowledge has led to many inquiries regarding orificial surgery. During the past fifteen years I have written a great many articles involving the orificial idea and nearly every one of them has brought me from a dozen to fifty letters asking questions regarding the philosophy or seeking advice regarding some special case. Out of these questions has developed quite a considerable business in consultations by mail. Thinking that possibly others may desire to acquire the same sort of a business I am going to give vent to a few ideas regarding the same.

The first and greatest law is that all first letters must be answered—whether stamps are enclosed or not. If the inquiry is from a professional brother answer his question as fully as possible or convenient in your letter and close by referring him to Prof. Pratt for further details. Advise him to buy the books and read and study and come to the clinic next year. Also if there is a competent orificial surgeon near him give him the address of said orificialist and suggest that he call on him or correspond with him. Be a "good fellow" and help your brother along even as you were helped.

Should the question come from a physician desiring a consultation regarding some case, go about it the same as you would any other consultation. Have him report the exact condition of the patient as best he can and then advise him as best you can. In many cases this will require several interchanges of letters for often you will have to tell your correspondent what pathological conditions to look for and what symptoms to note. It is a startling truth that a large majority of the medical profession are lamentably ignorant of the various reflexes and of the sympathetic nervous system. Incidentally do not forget to charge your consultation fee, from five to ten dollars according to the amount of work involved. Quite a large number of inquiries will come from prospective patients. They hear of you and your methods from other patients or they may read some of your articles in a medical journal which they have picked up in a doctor's office or in a drug store. Any way they have become cognizant of your existance and have become prospective patients who are to be developed. The first thing to do is to get a general history of their case, to get their own story of their disease; and to do this in as short a time as possible I have arranged and had printed a small folder of "Suggestions to Patients," a copy of

which is enclosed with an encouraging letter to the prospective patient. This folder starts out thusly:

"Read these suggestions carefully before writing your letter, and in telling your symptoms use plain, simple language, avoiding all technical and medical terms. Do not omit symptoms because they appear to you to be of no importance, as everything is important to the physician, and apparently insignificant symptoms may determine the choice of the best remedy. Describe as near as you can all symptoms just as they seem to feel to you, stop and study over the matter and then tell it just as you would if writing to a friend or relative; describe pains accurately, as burning, bursting, cutting, crushing, darting, drawing, lacerating, piercing, pressing, pushing, pulsating, stinging, stitchy, shooting, tearing, throbbing, or any other sensation."

"Do not hesitate to write all your symptoms out in full as no one but the doctor sees your letter, and he must have your fullest confidence and know all about you in order to treat your case satisfactorily. Do not let false modesty defeat your cure."

"Give your name, occupation, age, sex; single, married, widow or widower and how long; nationality, temperament, complexion, color of hair and eyes, your build, height, present and average weight. Do you smoke, chew or snuff tobacco, use alcoholic drinks or narcotic drugs and how much? Have you been vaccinated, when, and from a point or another person's arm? Are parents living or dead; if dead give date and cause of death and age at death? Give particulars if any blood relations died of hereditary diseases. What diseases are commonest in your family?"

"Were you sickly when young; from what diseases and at what ages? Does an injury to your skin or flesh heal quickly or does it fester and keep sore? Have you or any of your family had scrofula, syphilis or blood diseases? What acute sickness have you had since being full grown? Have you ever had any skin diseases, and what? Are your nails long, short, arched, clubbed, flat, regular, irregular, brittle, tough, thick, thin, smooth, rough, ridged, cracked or with white specks on them? Give color of nails. In case of previous sickness tell what medicines you have taken, including home remedies, patent remedies and those prescribed by the doctors. If you do not know names of medicines tell what they looked, smelled and tasted like and whether given you by an allopathic, homeopathic, eclectic or physio-medical doctor. If any medicines have releived or aggravated your troubles tell which ones, and how. Give all liniments, salves, face powders, pills, teas, headache powders, etc., you have used occasionally or regularly and what for. If you have ever been poisoned in any way, or had an overdose of any medicine tell about it."

Then follow groups of questions or suggestions relating to the mental symptoms, head, hair, ears, eyes, nose, throat, mouth, stomach, bowels, kidneys and bladder, heart and lungs. Questions relating to the sexual organs of men and women are printed on seperate slips and the needed one enclosed with the general folder. Inasmuch as some persons are very diffident about making their troubles known, the folder closes with the following admonition:

"Remember all letters are confidential, so there need be no hesitancy in answering all questions freely and in telling other matters not suggested herein if they bear upon your case. In taking your case for treatment the doctor relies solely upon what you tell him and prescribes accordingly. Sometimes recovery does not take place as rapidly as expected because of obscure conditions which can only be cured by

radical treatment, and which the patient cannot describe. Such cases should come to the doctor for a personal examination, and treatment at his private sanitarium as may be needed. Unknown persons should always enclose four cents in stamps to insure an answer to their letters. Address all letters carefully and very plainly to Dr. Ralph St. J. Perry, P. O. Box 206, Farmington, Minnesota."

A patient who writes you and follows the suggestions given in this folder will surely give you sufficient data to enable you by a few leading questions on more prominent symptoms to outline a course of treatment suitable for the individual case.

This is a brief outline of a method of consultations by mail which has materially added to my cash account for several years. Some of my hyper-ethical friends say it is quackish. They claim that no physician can successfully or satisfactorily treat a patient whom he does not see. To my mind such ideas are twaddle and show that the physician who talks that way is not keeping abreast with the progress made in medical and surgical science or science in general, and especially is he deficient in the up-to-date American methods of doing business.

For many reasons, which need not be discussed here, there are those who find it impossible or inconvenient to come to your office for treatment, or to have you visit them at their homes. Having long since recognized the fact that such a condition exists, and knowing that these people are entitled to such relief as can be given them, the duty has devolved upon you to devise some method of treatment whereby the desired end can be attained. The result has been the evolution of the "home treatment." Notwithstanding the fact that diagnosis and treatment by mail are frowned upon by many, it is nevertheless true that a great deal of good has been accomplished in this way, to the eminent satisfaction of both patient and physician.

When some remote sufferer, who has heard of your skill and success from a grateful patient, appeals to you for relief from her aches and pains, what are you going to do? Send her a polite reply that you can only treat such cases as come to you, and thus dash to pieces her hopes of cure; or are you to write her an encouraging letter, asking her the details of her case, and offering to do the best you can for her? Are you to maintain a stiff neck on the side of your peculiar views on diagnosis and treatment, or are you going to relax a little on the side of humanity and extend a helping hand? When I first began the practice of medicine I was afflicted with an excess of cervical rigidity, but now I do not hesitate to extend my hand to any sufferer who calls for help—that is my business—it is what I have spent years of time and thousands of dollars in learning, and it is the way I make a living for my family. Quite often my plan has brought me a great deal of other business which would have gone elsewhere had I refused to do what I could when first appealed to.

* * *

I second all that is said in the Wisconsin Medical Recorder pages 293-298. A doctor who resides in New Mexico near the state line of Colorado, was arrested for practising in the latter state, five miles from his residence. As Colorado refuses licences to non-residents the doctor was forced to move away, and that town has no physician; now can they call in one from Colorado? For New Mexico will not grant a license to outsiders. There you are.

Dr. J. H——.

Chicago.

DISCUSSIONS.

This Department contains each month case reports, letters, inquiries and replies from our readers. If you have a case you would like some help with, or a question to ask, write to us and we will publish it in this Department and you will get the opinions of our medical brethren. When you have an interesting case, write a report of it and send it in and it will help some one else We need each other's counsel so let us help each other from our experiences. Letters are desired from physicians on any subject pertaining to our profession.

NAIL IN THE FOOT.

It was a rusty nail cut. I filled my hypodermic syringe with 4 per cent. cocaine solution and the needle slid easily and with little pain to the bottom of the puncture about half an inch. I injected slowly, holding a compress over the orifice, obtaining local anaesthesia. With a small curette I rake out the hole, obtaining fragments of stocking, etc. I then take a blunt ended blade, passing it to the bottom of the puncture and enlarge the opening so that it is as long or longer than the puncture is deep. In a few minutes pressure checks hemorrhage. I then evert the wound all possible, cleaning away all dark specks. Then under a pressure of the thumb, I inject a saturated solution of camphor in carbolic acid, then putting the wound upon the stretch, I place some gauze saturated with this at the mouth of the wound. Covering the surrounding part for one inch from the wound with icthyol, I place over it a small plaster of antiphlogistine and bandage.

Results prove that this is a good way to treat "nail in the foot" if the patient calls promptly after the accident.

C. E. Boynton, B. S., M. D.
Smithfield, Utah.

* * *

Most of the Discussions articles have been crowded out this month.

COMMENTS.

Accept my thanks for copy of your journal (September number). I gave it a thorough reading and will say it contains much food for thought. Some of the articles were a little too deep for me, especially the one on "Physiology and Psychology", by Dr. Gasser. Perhaps if I had seen former numbers of the journal I could have followed him more closely and understood him better. "A Medical Trust?" This article is too long to analyze or to criticise in a letter to you, but it will be like many other attempts to demolish those in power The American Medical Association may contain only a very small percentage of the medical profession, but it contains the most brilliant part of the profession. It contains the brainy men of the profession. Brains (and not numbers) rule everything and everywhere. The writer shows up many apparent evils incident to the association, but he will make no headway in fighting it. It is a strong association in the best term. It may have many objectionable features but it is the best institution of its kind. It builds up rather than pulls down. It has accomplished more than any other like body. Medicine as illustrated by the association holds a higher position than ever before. Its members stand well at home and abroad. Your writer may mean well but he is barking up the wrong tree. The American Medical Association can withstand all such thrusts and not be injured just a little bit.

Success to the association and its journal, the leading medical journal in America. W. P. Howle, M. D.
Charleston, Mo.

There are many brainy men in the Association but not all the brains of the profession are in it by any means.—Editor.

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J. P. THORNE, M. D., Editor and Publisher, Janesville, Wis.

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Letters, Case Reports and **Questions** are desired for our Discussion Department.

Society news and reports and items of interest are gladly received.

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THE ORIGINAL SIN.

The newspapers of today are so crowded with reports of crimes of all kinds as to make the reader almost believe that the world is growing continually worse instead of better. It is easy to understand how children brought up amid evil surroundings develop into criminals. It is also easy to understand how crimes can be committed in a moment of passion or under the influence of liquor. But it is most difficult to understand how people reared with good surroundings and healthy moral atmosphere can commit most heinous crimes. We can explain some such cases by the love for money to be obtained by crime. There are often cases where there is no gain derived from a crime, which is committed sometimes out of hate or jealousy and again appears to be done out of pure devilishness. Every physician is more or less of a student of psychological problems and here is one worth studying: Are these cases of the result of original sin, moral perverts or what?

CHILD LABOR.

The great business prosperity of this country has caused all the wheels of the many factories to turn unceasingly the last few years. As a result of this activity all over the land child labor is more or less employed in spite of laws. Child labor means uneducated and undeveloped adults in the future, a large class of people, stunted physically and mentally. Young girls working in factories are not properly developed, are never fit for motherhood and their offspring is physically defective. We look with horror upon the terrible evils of child labor in the mills of the south, but we have child labor all around us in the north. Until at least sixteen years of age children should be in school and not in factories. As physicians interested in the future moral and physical welfare of the people this question is worthy our careful thought.

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THE DOCTORS' WORLD.

Therapeutic Briefs, Medical News Items, and Clinical Notes on Medicine and Surgery.

Sanitary Barber Shops.—The State Board of Barbers' Examiners of Wisconsin has just issued rules governing the operation of barber shops in this state. The enforcement of these rules will largely eliminate the barber shop as a means of spreading disease. Some of these rules could be applied with great advantage to other public places as well as barber shops. The rules are:

1.—All cups and lather brushes must be thoroughly cleansed in boiling water before using.

2.—Hair brushes must be combed after using and both brushes and combs must at all times be kept thoroughly clean and washed after each day's work with water of ammonia or solution of borax.

3.—Fresh and clean towels must be used for each patron and all towels must be boiled before using again.

4.—All astringents used for controlling bleeding or for other purposes shall be used in the powered or liquid form. Crystals of alum, blue stone and like astringent substance, shall not be used. All soaps, perfumes, bay rum, witch hazel and other toilet articles and all antiseptic solutions shall be of good quality. An antiseptic solution shall be used on each person after shaving.

5.—No barber shall, under any circumstances, shave a person affected with erysipelas, or any disease or affection of the skin or face where pus or matter is upon or under the skin, unless such person shall be provided with a separate individual cup and lather brush.

6.—All razors, shears, clippers, needles, tweezers or other instruments used upon any person affected with erysipelas, or any affection of the skin, of the face or scalp where pus or matter is upon or under the skin, shall be sterilized by immersion for not less than five minutes in a 20 per cent solution of formaldehyde or alcohol or trikresol before used upon another person. The barber shall wash his hands thoroughly in water that has been sterilized by boiling before serving the next customer. (Trikresol is a powerful disinfectant. It is cheap and can readily be obtained at any drug store. It does not injure the instruments.)

7.—In case the face of the patron shows any indication of skin eruption the face is to be bathed with water that has been sterilized by boiling. No barber should undertake to treat any eruption of the skin, but shall advise consulting a physician.

8.—The use of finger bowls, powder puffs and sponges is prohibited, and no barber shall keep any of them on his working stand.

9.—No barber who has any venereal or other contagious disease shall practice his trade No proprietor of any barber shop shall retain in his employ any barber known to have venereal or other contagious disease.

10.—No barber shop shall be considered to be in a sanitary condition if any part of said shop is used as a living, cooking or sleeping apartment.

11.—The floors, walls, furniture and fixtures of every barber shop shall be kept clean. Every cuspidor and waste paper bowl shall be cleansed with boiling water at least once every twenty-four hours.

12—Every barber shop shall be sup-

plied with a sufficient quantity of hot water for all cleansing and sanitary purposes.

Adenoids.—Wilhelm Meyer's report of his researches and observations on adenoid vegetations, published thirty-five years ago, opened a new field for beneficial operative work. The good which has followed his classical report cannot be calculated. Thousands of cases have been cured of deafness or prevented from becoming deaf by this successful operation of adenoids. Ear troubles, mouth breathing, various reflexes and numerous other conditions have yielded to the operative treatment.

We have had a very large experience in treating adenoids and, have watched for years, practically the worlds literature upon the subject. The reports of good results from adenoid operation from all over the world are most gratifying. Another feature of these reports which we have carefully noted is that a good many serious cases of hemorrhage have been mentioned and some fatalities, something like 25. But we believe most of these cases have been where the operation was done without proper precaution. After reading these many reports and after an extensive experience, it is our opinion that this operation should never be done in an office, but either in a hospital or at the residence with a trained attendant. When performed at the house the case should be constantly watched by a trained nurse. Cases have been reported of serious hemorrhage following the operation, the patient swallowing all the blood and the condition of the patient not realized until in a state of collapse. When an adenoid operation is done in an office we believe either it is not done thoroughly or if thoroughly there is a decided amount of danger connected with the procedure.

If properly done, with skilled, trained attendants to look after the patient for several days, the danger of hemorrhage is very slight. The results from this operation are so good as to make it one of the most satisfactory of operations.

In a recent number of the Cleveland Medical Journal, Dr. S. H. Large has an article which so nicely presents the dangers of adenoids that we are pleased to republish it below:

Adenoid vegetation in children is one of the most common afflictions with which we have to deal, and one that causes very serious results if not removed. These growths are made up of lymphoid tissue and are sometimes given the name of the third tonsil. Some of the symptoms are mouth-breathing, dull expression of the face, the open mouth, nasal twang, forgetfulness, dulness at studies, restlessness during sleep, snoring, and a mucous discharge sometimes tinged with blood. Examination of the post-nasal space either by mirror or finger reveals the mass of lymphoid growth which may be situated either centrally or laterally around the openings of the Eustachian tubes. The most serious and common complication is deafness. Children who suffer from adenoid growths, if they contract any of the exanthemata, seldom recover without some damage being done to the organs of hearing, because the lymphoid tissue acts as a fit nidus for infection, or it may swell up and block the Eustachian orifice, which eventually leads to an otitis media or a suppurative otitis media, which may result even in total deafness.

A child suffering with adenoids seems to take cold upon the least exposure, and although no name has been given to this cold in the head it certainly is an adenoiditis. The seriousness of adenoids has never been impressed strongly enough on the minds of the general practician as it is he who first sees these

cases. Adenoids to a child are as dangerous as is the catarrhal appendix to the individual, and the sooner they are removed the better. In schools the same pains should be taken for correcting this affection as is taken in correcting errors of refraction. Only in exceptional cases do I remove the turbinates for hypertrophy. I find, however, that if the lymphoid tissue in the post-nasal region is removed, and the turbinates are cauterized, in 99 cases out of 100 the cause of the trouble will be removed.

There are many other serious complications that I have only time to mention, viz., indigestion, convulsions, stammering and stuttering, arching of the hard palate, irregularities of teeth, prominence of the upper jaw, stunted growth, large open nostrils, headaches, loss of memory, nocturnal enuresis, loss of smell, cough and adenitis. The operation for the removal of adenoid growth is so simple and the results are so satisfactory that it should be done without delay. During the last year I have operated a hundred times in cases of this kind and in every case there was an improvement. I never perform the operation under a local anesthetic as I have been unable to make it painless. For young children under the age of four years I prefer chloroform, and for older children our latest anesthetic, the inhalation of ethyl chlorid, ether or nitrous oxid.

The operation can be undertaken at any age. Last month we operated upon a baby six months old whose post-nasal space was so blocked that it was unable to nurse, and was becoming very emaciated. Two weeks after the operation the child had gained five pounds. If one could see the number of deaf people that are seen daily in the clinics and in private work, most of them dating the beginning of deafness at childhood, more pains would be taken to correct this affection.

ALKALOIDAL THERAPEUTICS

Original articles, reports and notes on dosimetry are desired for this Department.

ACONITINE.

By Wm. P. Hough, M. D., Columbia, La.

So much has already been written on the action of this remedy that it would be a loss of time to those who have had experience with it to read these notes, but to the uninitiated I will speak briefly of my experience with this valuable remedy. In alkalometry, aconitine is considered perhaps the most potent of the alkaloids, meeting more indications than any in the list.

The most frequent use of aconitine is in controlling fever, and of all remedies, it does this with greater certainty and if properly used, with more safety than any of the antipyretics that I have ever used, but in order to obtain the best results it should be administered in fractional doses at frequent intervals until effect is observed, then at longer intervals to sustain effect. In all ephemeral fevers, acute catarrhal fevers, in all inflammatory fevers, pneumonia, peritonitis, meningitis, pleuritis, etc., etc., the effects are most satisfactory, the skin becomes moist, the fever reduces, the heart and nerves become tranquil, disease either aborted or most materially modified. In pharyngitis, tonsillitis, acute coryza, etc., a granule of Abbott's aconitine amor. $\frac{1}{137}$ gr. with a granule of atropine sulph. $\frac{1}{250}$ or $\frac{1}{500}$ gr. every 15 minutes to a half hour will act like magic. In many forms of neuralgia, aconitine given to effect will give relief when all other remedies fail.

I recently relieved a severe case of

facial neuralgia in a man by giving a granule of amor. aconitine $\frac{1}{137}$ gr. every 10 minutes until 6 granules were given. The result was so pronounced that it surprised me.

In weak, fatty heart, aconitine of course is contra-indicated, but in hypertrophy or overaction of heart, it is the remedy per excellence. I use the Abbott's aconitine amor. $\frac{1}{137}$ gr., repeated at 15 minutes intervals till effect, then at longer periods to sustain effect.

PILOCARPINE.

By J. A. Burnett, M. D., Brawley, Arkansas.

The leaf of jaborandi, a South American shrub, contains two alkaloids, pilocarpine $C_{11} H_{16} N_2 O_2$, and jaborine $C_{22} H_{32} N_4 O_4$. These two alkaloids are therapeutically antagonistic in their action. Jaborandi usually contains more pilocarpine than jaborine and is used for the same purpose as pilocarpine, but occasionally it contains more jaborine and when this is the case not only is the physician disappointed, but harm may be done, therefore any one can readily see the great advantage of using the alkaloid pilocarpine over the crude drug jaborandi. This also applies to all other drugs whose action depends upon an alkaloid, especially if it contains two or more alkaloids, and any of them are antagonistic in their action. If there is a small amount of pilocarpine and a large amount of jaborine in jaborandi its action will be similar to atropine as jaborine acts similar to atropine and atropine and jaborine is the best antidote for pilocarpine. Pilocarpine should not be prescribed except in very small doses for pregnant women in gastro-intestinal irritation or weakly patients as it acts quickly and vigorously, its action lasting about four to six hours, and as much as two pints of saliva may be secreted and four pints of perspiration and is followed by temperature falls from 1° to 4°, fatigue, drowsiness, weakness and depression which lasts for several hours. Also when prescribing it for those whose heart is not real strong, its action must be closely watched and a heart stimulant used with it as it is a heart depressant. Children are less affected by it than adults by proportionate doses. The spleen whether enlarged or of normal size is contracted by pilocarpine and it may prove to be of much value in chronic malaria; also the bladder and uterus are contracted by its use. If pilocarpine fails to act upon the skin and salivary glands it may in some instances act vigorously upon either the kidneys, stomach, intestines or the lungs and in such cases large quantities of urine will be excreted, mucus be vomited, diarrhea or mucus expectorated. When pilocarpine mostly affects the lungs, often bronchial mucus is formed in such quantities that they are unable to expel it and death ensues.

Pilocarpine is very useful in muscular pains, muscular spasms, inflammatory rheumatism, when there is pain and swelling about the joints, rendering them stiff and sore, fevers and erysipelas when not marked by great debility, puerperal septicema, anasarca, suppression of urine, suppression of milk, mumps, coryza, laryngitis, bronchitis, orchitis and it has many advocates in diphtheria and alopecia, while others say it is worthless in these diseases.

Pilocarpine is sedative, diaphoretic, diuretic and sialagogue, also used locally as a myotic. The result of a few large doses should be closely watched and never long continued.

Rundschau.

By H. Speier, M. D., Rochester, Minn.

DECLINE OF MATERNAL LACTATION.

The patriot's desire to secure for his people more vigorous vitality is seconded by the efforts of the scientist. They can point to some successes. Infant mortality, which in times past reached frightful figures, has been materially reduced by regulation of the milk supply in cities, more rational artificial feeding and a wider dissemination of knowledge. Still it remains unnecessarily high, owing to remoter causes. One of them is the growing incapacity of mothers to nurse their offspring. Bunge of Basle, Switzerland, has made exhaustive studies of the subject. He makes two classes, those who were able, and those who were unable to nurse their children. He found then, among 665 women, 182 able and 483 unable to nurse. The figure would probably not differ greatly for American women. In less civilized countries a very different situation prevails. One observer relates that in Siam children two or three years old interrupt their play to return to their mothers' breast and tells of boys of nine years who were seen to put their palm leaf cigars behind their ears to take a sip of their mothers' milk. Two or three years is in fact the most common length of time for maternal nursing among non-European people, Esquimo women in King William's Land even nursing their children fourteen and fifteen years.

One cause of the inability of women to perform this highly important function is unquestionably to be found in the complex social conditions of our time. A nursing woman should be allowed to enjoy equanimity and live in healthy and restful surroundings. We know that this pre-requisite is generally lacking in all the walks of life, among the poor as much as the wealthy. Bunge, however, finds the cause mainly in heredity. He says: "If a woman cannot nurse her child, the daughter, almost without exception, cannot nurse either, and this faculty is irreparably lost to all coming generations." And further: "If the father be a drinker, the daughter loses the ability of nursing, and this faculty is irretrievably lost to all coming generations. "As corroboration of the possible influence of alcohol it may be mentioned that among Mahometan people artificial infant's food is entirely unknown. Bunge draws from his observations the conclusion that a healthy man, who wishes healthy decendants, should not marry: (1) a girl that could not be nursed by her own mother; (2) a girl of tuberculous family; (3) a girl of neurotic family; (4) the daughter of a drinker.

The subject is an interesting one and deserves further study, both from the scientist and the sociologist, who wishes to discover means to arrest race suicide.

PRACTICAL USELESSNESS OF A SERUM.

Serum against snake poison, as prepared by Professor Calmette of Paris and at one time looked upon as of great promise for the tropics, has been proven to have such limitations as to make it practically useless. Extensive trials with it in the French tropical colonies have shown, that serum taken from a certain kind of a poisonous snake, if inoculated into a person, confers comparative immunity against the bite of that particular snake, but not against any other sanke. As most tropical countries are overrun by a great variety of poisonous snakes, it

would be necessary to inoculate a person with the serum from all the poisonous snakes in the district, in order to furnish him complete protection. It is hard to guess at the result of such a measure, if at all feasible.

PUERPERAL ECLAMPSIA.

Science has not yet succeeded in solving the question of the etiology of puerperal eclampsia. From all theories, clinical observations and pathological investigations only one indisputable fact results, namely, that the disease is an intoxication, coupled with insufficient elimination. The toxines may originate within the mother, from diseases of different organs, possibly from bacterial infection, or in the fetus. The latter view was presented to the Gynecological Congress at Giessen by Fehling. There is a considerable force in his reasoning. "The fetus," he says, "having its own metabolism, produces substances which are carried into the maternal circulation through the placenta. If the excretory function of the mother is equal to the occasion, we note no bad effect; if, however, such is not the case, eclampsia is the result." The same conclusion may be drawn from the fact, that such convulsions occur only during pregnancy, while intoxication from disease of maternal organs is found also at other times, that eclampsia is most frequent towards the last stages of pregnancy, when fatal metabolsin becomes more active, probably exceeding the excretory powers of the fetal kidneys, and that as a rule eclampsia is arrested by the delivery of the child.

SERUM TREATMENT OF PNEUMONIA.

Dr. Morse of the Harvard Medical School reports to the American Pediatric Society eight cases of pneumonia of infants treated by antipneumococcic serum. It is not necessary to go into the case in detail, but the general observations are of interest. In no case did the serum have any perceptible effect on the temperature, nor on pulse and respiration. In no case in which the time of the onset could be determined was the course of the disease shortened. In fact, the crisis occurred later in these cases than is usual in pneumonias of infants. In seven out of the eight cases no benefit whatever was produced by the serum, but in six cases an increase of physical signs was noted, while the serum was being used. In the discussion other men reported similar experiences and that they had given up the use of the serum.

THE TAX-LIAR.

The annual farce of assessment of personal property has, in this community, produced more than usually startling developments. In a city of about 8,000 people, conservative and solid, with a good deal of culture and substantial wealth, the returns show only $300 worth of diamonds. In any of the fashionable churches one will on a Sunday morning have right before one's eyes diamonds at many times that amount, and ladies are out shopping every day, who would feel insulted, if one estimated their rings at only $300. The people, who failed to acknowledge possession of those costly baubles and thus shirk their part of civic duty, are in all the ordinary affairs of life honest and truthful. The state board of equalization, conscious that here is a bad case of taxdodging, raises the assessment on diamonds 300 per cent. That is, it imposes punishment on the few who were honest, while those who lied to the assessor go free. They can smile and say to the other fellow. "Serves you right. Why were you such a fool?" Well, he won't be another year, he will lie, too.

What a beautiful system, which makes the poor man pay most of the taxes and makes liars of men! How can we hope for good citizenship, as long as we keep such a corrupting and immoral system alive?

MEDICAL RHYMES

PASTEUR.

JENNER.

ODE TO JENNER AND PASTEUR.

By Jno. J. Caldwell, M. D., Summit, N. J.

INTRODUCTORY REMARKS.

"What gave Marcellus the greatest concern," relates Plutarch, "was the unhappy fate of Archimedes at the siege of Syracuse." So absorbed was the great mathematician in elaborating problems for the defence of the city, that he knew not that the city itself was taken, and the army of the enemy in the midst of it, when a soldier demanded his surrender. His reply was, with a repulsive motion of the hand, "Hold until I have finished my problem!" The soldier, enraged, pierced him through the body with his weapon.

Now, such mental absorption gathers and concentrates all the powers of the intellect; and it was such absorption of the mind that induced and enabled Jenner and Pasteur each to devote and spend a lifetime in developing their grand truths.

PROLOGUE.

More graceful tribute genius never paid
  To genius, nor from source more high and pure,
Than, in the world's great medical parade,
  Was justly paid to Jenner and Pasteur.

There 'mid high intellects in bright array—
  Which art and science both were proud to see—
The noble Paget, in his manly way,
  Poured out his soul in lofty eulogy.

This eloquent address, which time will find
  Echoing onward through the ages long,
An honor to its author's heart and mind,
  Inspired this humble tribute of a song.

ODE.

I.

Genius is mighty, even in its whims;
  These are but steps into the vestibule
Of the grand shrine of inspiration,
  Sipping around the rims
  Of the Castalian pool,
Precedent to the great intoxication;
  Flows from the wind of prophesy,
  Blossoms that fell from the aesthetic tree.
    Yet in them do we trace
    The spirit of artistic grace;
    The poet's and composer's muse,
    The painter's and scientist's diffuse
    Their words, their notes, their hues;
Fancy, elated upon Ariel's wings,
Floats in a scene of fair imaginings,
Hears but sweet sounds and sees but beautiful things.

II.

But where the impulses of pure desire
To benefit mankind the thoughts inspire
Of noble genius, there the soul of love
That lives in all, around, below, above,
And in its incarnation prove the might
Of mere unselfishness, its one delight,
Hastes through this open doorway of the heart
All of its wonderful powers to impart;
And genins, strengthened by the immortal will
Of doing good, breaks down all barriers till
Its purpose is achieved, its work is done,
And triumph for the cause of love is won.
Then Art, in all departments of her state,
Seeks to do honor to the good and great.

(To be continued.)

THE DOCTORS' LIBRARY

This Department contains each month reviews of the latest and best books. Items of book news will keep readers informed on progress in the world of medical literaure.

NOSE AND THROAT WORK FOR THE GENERAL PRACTITIONER.—By George L. Richards, M. D., Fellow American Laryngological, Rhinological and Otological Society; Fellow American Otological Society; Associate Editor Annals of Otology, Laryngology and Rhinology; Otologist and Laryngologist Fall River Union Hospital, Fall River, Mass. Pages 336. Price, Cloth, $2.00. International Journal of Surgery Co., 100 William St., New York.

Books on nose and throat abound, but this book is different from the others. The book derives especial importance from the fact that the diseases described therein constitute so large a share of the physician's daily routine of practice. It has been the author's aim to teach the practitioner how to diagnose these cases and how to treat them successfully and according to modern methods. With this object in view every effort has been made to describe the treatment in such detail as to leave no point obscure, and to simplify the technics as much as possible so as to avoid the necessity of an elaborate and expensive armamentarium. No space is occupied with theory, and the information given is based for the most part upon the author's own extensive clinical experience in diseases of the nose and throat. For the sake of completeness a number of conditions are discussed which properly belong to the specialist, but with these few exceptions the diseases are such as can be treated by the general practitioner. The book is written in a very clear and interesting style. A noteworthy feature of this work is the large number and excellence of the illustrations.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS.—Comprising Ten Volumes on the Year's Progress in Medicine and Surgery, Issued Monthly Under the General Editorial Charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology, Chicago Post Graduate Medical School, Vol. VIII. Materia Medica and Therapeutics, Preventive Medicine, Climatology, Suggestive Therapeutics, Forensic Medicine. Pages 326. Cloth $1.50. The Year Book Publishers, 40 Dearborn St., Chicago.

The section on Materia Medica and Therapeutics is by Geo. F. Butler, Ph.G., M. D. New drugs of the past year and their values are presented. Special attention is given to physical therapeutics, including the application of electricity, light, heat, water and massage. New developments in Preventive Medicine are well given by Henry B. Favill, A. B., M. D. Norman Bridge A. M., M. D., furnishes the section of the book on Climatology. One especially interesting section is Suggestive Therapeutics, by Dr. Daniel R. Brower, containing many excellent suggestions. Dr. H. W. Moyer furnishes the abstracts on Forensic Medicine. There is certainly full value for the money in this book.

A COMPEND OF DISEASES OF THE SKIN.—By Jay F. Schamberg, A. B., M. D., Professor of Diseases of the Skin, Philadelphia Polyclinic; Fellow of the College of Physicians of Philadelphia. Third Edition, Revised and Enlarged, with 106 Illustrations. Pages 291. Price, Cloth, 80 cents net. P. Blakiston's Son & Co., Philadelphia.

This is a student's compend which the practicing physician will find equally valuable, as a handy reference work on dermatology. The subject of skin diseases is presented in succint, lucid and readable form, especial attention being paid to differential diagnosis and treatment. The first few pages are devoted to the anatomy of the skin and the classification of its diseases. The author then takes up the discussion of all the important diseases, giving the essentials. The book is an up-to-date condensed treatise on dermatology. The illustrations are good, many being full page plates.

BOOK NOTES.

Dr. G. Frank Lydston will issue a new book this fall entitled, "The Diseases of Society." As a study on sociology it will be of great interest. Recorder readers who have read Dr. Lydston's other works will especially welcome this book.

The October "Success" is a big one. It contains just thirty new features. The variety is noticeable,—each article, poem, and story having been chosen with rare discrimination, so as to make a publication of perfect balance. The leading feature is an inspiring and graphic life-sketch of Adelina Patti who is soon to return to America. It is one of the best histories of her life and its purpose ever written, and its authenticity can not be questioned, for William Armstrong, who wrote it, was sent to England by "Success" specially for that purpose. Lillian Nordica writes on "Aids to Young Singers' Success" and Sibyl Sanderson on "The Necessity of Caring for the Voice." One very attractive feature is Walter Wellman's "Operating the United States Senate," which tells of the inner workings of that great political body.

McClure's October number contains Lincoln Steffen's long looked for Chicago article, "Chicago; Half Free and Fighting on," a fine inspiring story of what the author regards as the most signal and significant achievement in real municipal reform that any of our great cities have to show. No art-lover should miss John La Farge's paper on the three great French artists, Corot, Rousseau, and Millet, with its beautiful tint reproductions of many of their famous canvases. Extremely interesting is Walter Wellman's account of what is without doubt, next to our own Isthmian Canal, the biggest and most important engineering project of the age, the drainage of the Zuyder Zee, whereby the Dutch are planning to increase the tillable land of their little kingdom by almost one-tenth. A. W. Rolker has a very entertaining account of the "Babies of the Zoo," for which, of course, all the baby animals have sat for their portraits. For fiction the most crocthety taste will find something to its liking in the variety presented.

Everybody's Magazine for October comes heralded with the announcement that under its new management the circulation has grown by 100,000, making the circulation 250,000 copies per month, during the past four months. Articles, stories, pictures, poems, proverbs, comments on the times, portraits of the eminent, intimate confidences from the publishers: somewhere in these lie the secret of success. In "The Madness of Much Money," Alfred Henry Lewis uses his trenchant pen as a stiletto and jabs freely and daringly at the follies of those whom most of us would run our shoes off to meet; surely an irresistible appeal to human nature in that! T. P.

O'Connor's study of "Labby" (Labourchere) is good. Literal portraits—photographs—show the heads of some of America's great orders, the Knights Templar and the Masons, the Bar Association, the Christian Endeavor, the D. A. R., etc., with a brief personal account of each. Timeliness, they say, has value; for that there is Will Payne's character-study of Chicago, coinciding with that city's celebration of it's hundredth birthday.

The novel this month in Lippincott's Magazine comes from Fredric Reddale's popular pen. Its title is "An Heir to Millions" and it deals with a fortune made in the California gold fields and inherited by a New York clerk with simple tastes. He begins in no novel way to spend the money, but when he learns that it is his through trickery he shows his mettle by refusing to buy the silence of a rascal and stands ready to take the consequences. In his prosperity he has a little neglected his sweet heart of humbler days, but things come round her way in the end. "The Return," by Ralph Marie Dix, is a touching and powerful episide, with a thrilling psychological thread. When Agnes Repplier talks on paper people are eager listeners. Her long residence abroad moves her to write about "The Tourist" in her notably keen and witty manner. She covers all nationalities in her comparisons and has evidently given much thought on her subject. "A presentation to Leo the Thirteenth," by Maude Howe, is a delightful description of a personal experience at Rome. The series of literary talks by George Moore, begun in the September number entitled "Avowals," is continued this month. In speaking of Balzac he says: "There is more vitality in a house described by Balzac than there is in many an English novel." There is a fine lot of short fiction in this number.

BRIEF MENTION.

When cystitis is caused by calculus, uriseptin is indicated because of its solvent value.

❧ ❧ ❧

You may need a good sign. Geo. Steere, 256 Clark St., Chicago, makes good ones at reasonable prices.

❧ ❧ ❧

The H. M. Merrell Co., Cincinnati, issues a catalogue which will interest you. A postal card will get it.

❧ ❧ ❧

Enzymol is a great pus destroyer. Fairchild Bros. & Foster, of New York, will furnish samples and literature free.

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No dull knives or razors if you use the dry hone made by E. A. Harrington, Waukesha, Wis. We have used it and know.

❧ ❧ ❧

Burnham's soluble iodine is an ideal preparation. One drop is equal to fifteen grains of potassium iodide. It is well worth trying.

❧ ❧ ❧

If you are not using Dr. Becker's compound digest, send today, to 107 Dearborn St., Chicago, for a free sample. It is a fine remedy.

❧ ❧ ❧

A. H. Robins, Richmond, Va., makes a very efficient cascara compound pill. He sends Recorder readers who wish to try it a very liberal sample.

❧ ❧ ❧

Triacol is a very valuable remedy. The Alpers Chemical Co., 4 and 6

White St., New York, furnishes Recorder readers free samples and literature.

Chloropepsoid is a remedy which has thoroughly established its value in dyspepsia. The Mueller Chemical Co., Lima, Ohio, will be glad to tell you about it.

This is the time of the year when a good road cart is handy. D. F. Sargent & Co., Genesco, Ill., make a good one which they gladly tell you about. The goods are right and the price is right.

The Household-Ledger for October is a fine magazine, having something of interest to each member of the family. If you want a copy send to 95 Liberty St,, New York.

The ambulatory pneumatic splint is a success. The greatest surgeons in the world use it. The Ambulatory Pneumatic Splint Mfg. Co., 164 Randolph St., Chicago, will send you free booklet about it.

Boston Electrical Appliance Co., whose ad. appears on page 1, were the first manufacturers to manufacture electrically lighted surgical instruments. Their goods are all first class and will last a lifetime.

The Golden Cross, Eye, Ear, Nose and Throat College and Clinic, of Chicago, offers correspondence and personal courses of instruction in optics at reasonable prices. If you want to study refraction, write them.

I have noticed in my experience that the blind, as a rule, are of a jovial and cheerful disposition, but I have yet too see a happy deaf man or woman. They live in a world of their own.—S. H. Large, M. D., in Cleveland Medical Journal.

Potassium iodide, as a therapeutic agent is rapidly becoming obsolete. The internal administration of iodine in some form is a necessity, but the objections to potassium iodide and sodium iodide are such that it is often impossible to use them. The newer iodine preparations do not irritate the stomach or produce iodisim, yet are efficient.

The advertisement of the Motzorongo Co. in this issue is worth reading carefully. It offers an opportunity to invest in something which will yield good returns and be safe. We have carefully investigated this company and know that it is honestly and ably managed. The company has issued a beautiful little book, describing its property, which is well worth sending for as it contains much interesting information.

A new and unique series of twelve books for doctors will soon be issued called the "The Doctor's Recreation Series." The first three books in the series to be issued this fall are: "The Doctor's Leisure Hour," facts and fancies of interest to the doctor and his patient, arranged by Porter Davies, M. D; "The Doctor's Red Lamp;" a book of short stories concerning the doctor's daily life, selected by Charles Wells Moulton; "In The Year 1800; being a relation of sundry events occuring in the life of Dr. Jonathon Brush during that year;" a novel, by Samuel Walter Kelley, M. D. The books will be reviewed in the Recorder as issued.

MODERN THERAPEUTICS

Brief original communications and short abstracts giving the latest in therapeutics.

A FEW REMARKS ON THE UTILITY OF LAXARSAL.

By N. H. Kassabian, A. B., M. D., Coopersville, Mich.

Saline laxatives have proved in my hands very beneficial in treating biliary disorders and habitual constipation, due to gastro-intestinal disorders, a condition which we confront in our practice almost every day and more especially in a certain class of patients, consisting chiefly of candy fiends, neurasthenics and anaemics. They complain as a rule of a weak digestion. anorexia and coated tongue. There seems to exist a general gastro-intestinal neurasthenia and in some cases, a complete deficiency of the peristaltic movements.

In treating such cases, I was in the habit of prescribing casc. sagarda aromatic, sod. phosphate or citrate of magnesia in the granular effervescent form, etc., but of late my attention was called to laxarsal, prepared by Truax, Greene & Co., a new saline laxative. A few occasions presented to me, and so I prescribed it. The following is the result of my clinical observations:

Case 1.—Male, aged 36 years, habitually constipated for a number of years. Had used for some length of time different kinds of laxatives, but their action was far from being satisfactory. Main objection was that it required very large doses in order to have the desired effect upon the bowels. I prescribed for him laxarsal and he was directed to take a teaspoonful just before retiring and early in the morning in half a glass of water. It acted as a mild laxative, unloading the bowels and improving his appetite and promoting general nutrition. He is very much pleased with the promptness and efficacy of the new laxative and still uses the laxarsal whenever occasion demands it.

Case 2.—Female, aged 26 years. Has had several attacks of passive biliary engorgement. She complained of severe and constant pains under the sternal end of the ninth rib. During these paroxysms, I have been summoned to prescribe for her. I generally gave her a hyperdermic injection of morphia, combined with atropia. Each time the narcotic acted like magic, alleviating her pain and inducing sleep. Knowing that laxarsal was a pronounced hepatic and biliary stimulant, I put my patient on this saline preparation. She was told to take a heaping teaspoonful of the laxative night and morning in half a glass of water. The treatment seems to have a very gratifying effect upon her. Those attacks which used to come quite frequently, she did not have for a long time. One day I met her husband in the car, he complimented me that his wife was improved wonderfully under my care and has not had any more "spells" for a long while.

Case 3.—Female, aged 36 years. An anaemic patient with poor appetite. Gastro-intestinal fermentations and habitual constipation. She was advised to take sod. phosphate, which she did for over a year and very faithfully, but it seemed to lose gradually its efficacy, so finally I put her on laxarsal and she was requested to watch the difference of its action from sod. phosphate. After using the new

laxative for two weeks, she reported that a small dose was sufficient to accomplish the desired result.

Case 4.—Female, aged 50 years. She has had several attacks of rheumatism and her present complaint was fermentative dyspepsia. After a thorough study of the case, concluded that her faulty digestion and assimilation was a potent factor in the causation of the uric acid diathesis from which my patient was suffering. The abnormal fermentation in her stomach persisted to the most rigid dietetic and medicinal measures. The accumulation of gas in her stomach was of such an enormous quantity, that it made it impossible for her to sit up in bed on account of the vertigo. Finally I outlined the following treatment for her, which benefited her decidedly, and she was out of her bed in about three weeks. A teaspoonful of laxarsal in half a glass of water, half hour before meals and a few minutes before each meal she was allowed to have a a tablet containing charcoal and sod. bicarb; while after meals she took a teaspoonful of lactated pepsin, containing dilute hydrochloric acid and tr. gentian comp. in ordinary doses. She pursued this treatment very faithfully and although a very obstinate case, she made a complete recovery.

Case 5.—Female, aged 18 years. Consulted me for obesity and for a plethoric condition. Her weight was gaining at an alarming rapidity. I prescribed for her some tablets containing podophyllin $\frac{1}{20}$ grain, calomel $\frac{1}{8}$ grain, and aloin $\frac{1}{12}$ grain, to be taken one after each meal, repeating dose every other day. I also prescribed laxarsal, a heaping teaspoonful early in the morning and before retiring. She took the saline laxative alternating with the hepatic tablets, that is every other day. She lost ten pounds in about two weeks. Now she only weighs 180 pounds, having lost twenty pounds since treatment was commenced. I ought to add that her diet has been very much regulated.

NEURASTHENIA.

By F. C. Gay, M. D., Brooklyn N. Y,

Mrs. S., a young widow of cheerful and optimistic disposition had been rapidly running down since the sudden death of her husband about a year before. When I first saw her in March, 1903, she was thin in flesh, anemic, very nervous, was menstruating excessively every two weeks, had badly coated tongue and was almost devoid of appetite or digestion. Insomania was such a terror to her that she sat up the greater part of every night rather than lie in bed awake. Although she was not melancholy, frequent and protracted crying spells made life miserable for her and her friends. The worst feature of this case was frequent attacks of nervous headache accompanied by severe palpitation of the heart which came on suddenly without warning; grew rapidly worse until the patient became cold, numb, convulsed, with hands stiff and twisted out of shape, and she wholly or partly unconscious. Stimulants and rubbing would have to be kept up for several hours to overcome the attack.

To cut short this description I will say that if there are any symptoms of neurasthenia which did not appear in this case, they must be some I have forgotten. Gave this patient hypodermics of chemical lymph No. 2, fifteen minims each dose, once a day for two months, then three times a week for two months longer. Improvement was manifest after the first week or two and was continuous thereafter. The patient is now full blooded, quite stout, has good appetite and

digestion, menstruates normally and regularly, sleeps well every night and has no more headaches, palpitation or convulsive attacks. No other medicine was given except when needed for occasional emergencies.

A DIAGNOSTIC CHART OF TUMORS AND PSEUDO TUMORS.

Battle & Co. have just received a complete and unique chart on the above subject, complied by Dr. Edward C. Hill from standard works on surgery and pathology, The subject matter is divided into solid neoplasma (sub-divided into benign and malignant growths) and true and false cysts. The general characteristics of each division are given, and their 24 classes, embracing over 100 varieties, are compared critically in columns under the following headings: Tissue, Topography, Number, Size, Confirmation, Color, Consistence, Mobility, Sensibility, Surrounding Tissues, Occurrence, History of Growth, and Miscellaneous Points. Features of special differential value are emphasized by the use of italics. This chart shows almost at a glance for ready comparison all that could be learned in a diagnostic way from the perusal of hnndreds of pages of ordinary text. It stands indeed to such books as an atlas does to a gazetteer. This very convenient and valuable compendium is at the command gratis of any and every practioner of medicine, who will take the trouble of writing a postal card to Battle & Co., 2001 Locust St., St. Louis.

THERAPEUTIC NOTES.

You can cure your hernia patients, make them happy and make some money for yourself. It costs nothing to find out all about the reliable cure prepared by the Ideal Chemical Co., St. Paul, Minn.

Fevers are followed by great prostration of the vital powers and emaciation, and the danger of relapses. Convalescence will be shortened and the probability of relapses or accidents will be wholly eliminated by keeping the patient under the support of bioplasm.

Daniel's const. tinct. passiflora incarnata is indispensable as a woman's nervine. It is employed in hospitals, sanitariums, and by leading physicians as the best calmative and tonic for nervousness peculiar to the female sex. It is given with satisfaction during menstruation, pregnancy, childbirth aud the menopause. It soothes the entire nervous system, tones it to a rational condition and strengthens it for the normal functions of life. It nourishes and restores the depressed vital organs. It is valuable in painful menstruation without flexion of the uterus.

IT IS A BAD HABIT

to whip up the waning physiologic functions of elderly people with strychnine or alcohol; after a short time the deleterious reaction is more certain than the primary stimulation. These patients need help of a character not furnished by a powerful stimulant—their functions need gentle reinforcement and, experience proves, the best agent for this purpose is Gray's glycerine tonic.

The atonic digestive disturbances almost constantly present in old age are promptly overcome by the use of Gray's tonic. It stimulates the enfeebled digestive glands to secrete abundant supply of gastric juice. This in turn assists the assimilation of food and improves the general nutrition. Then too, these patients feel better because

the remedy acts as a prop to the entire system; they are less languid, are not so easily fatigued upon exertion and are mentally more alert. Many physicians report that the routine employment of Gray's tonic in those patients in whom are present the signs and symptoms of old age, imparts a degree of comfort and well-being, free from after-effects, not obtainable from any other medication; one physician states "it picks them up and holds them together."

Another strong reason for the use of Gray's tonic in elderly people is that it wards off the tendency to inflammations of the respiratory organs; this fact has been noted and commented upon for many years past and is doubtless due to the fortifying action of the remedy upon the general constitution and its specific influence upon the respiratory tract.

Experience shows that it is good practice to administer Gray's tonic to all patients in whom are noticeable the symptoms due to advancing years. The absolute freedom of the remedy from depressing or other detrimental reaction makes it the safest and most preferable means of combating the exhaustion and enfeeblement of age.

THE ADVANTEGES OF COMBINING REMEDIES.

John Moir, L. R. C. P. and L. R. C. S. Ed., in "The Therapist," London, says: "Latterly I have been using heroin very extensively in tablet form in combination with antikamnia, and found the combination to act charmingly, both for relieving pain and in procuring comfortable, restful sleep, so very desirable and necessary after sleepless periods, caused by a protracted, irritable cough. The soothing rest in these cases was also characterized by a light but well-marked fall in temperature; but the greatest benefit of all in this treatment is that, although the distressing frequency of the respiration was reduced, it was stronger and heavier and less spasmodic, wiih a beneficial effect upon the heart at the same time. The tablets I use contain antikamnia 5 grains, heroin hydrochlor, $\frac{1}{12}$ grain, and were given every two, three or four hours, in cases of cough, bronchitis and respiratory affections generally, according to the severity of the symptoms, but usually one tablet every three hours. I found that the respiration was rendered easy, the expectoration was loosened without difficulty, and sleep was more readily obtained than with morphine, and unlike morphine there were no after effects. I have, personally been taking antikamnia and heroin tablets three times a day for an irritating cough, with occasional inclination to breathlessness; so that I have every reason to be thoroughly satisfied with them as sedatives and calmatives."

PALATABLE YET EFFECTUAL.

There is a widespread belief, that physicians as a rule, consider well founded, that cod liver oil is not only a remedy of decided power, but a food of very high value. Every physician knows however that a very large number of patients who should and doubtless would, get much good from it, cannot, or will not take it. This is largely due to the fact that the ordinary preparations are so nauseating as to cause serious digestive disturbances, while in many cases the stomach will not even retain them. It is notorious that the so-called "tasteless" preparations are indeed tasteless because they contain no cod liver oil, but there is a preparation that contains all the potent elements of cod liver oil in a form pleasant to the taste and agreeable to

the weakest stomach. We refer to Hagee's cordial of cod liver oil with hypophosphites of lime and soda. Eminent physicians pronounce it a triumph in modern chemistry and prescribe it when cod liver oil treatment is indicated. In our hands results with it have been most satisfactory.—Massachusetts Medical Journal.

RIGID OS.

A rigid condition of the cervix uteri is one of the frequent causes of tardy labor, and therefore greatly enhances the dangers of parturition. In most instances this condition is due to a spasmodic contraction of the uterine muscles which is particularly liable to occur in women of nervous disposition. In these cases Hayden's viburnum compound is a well tried and invaluable remedy. Its anodyne and antispasmodic effects are strikingly exhibited, the rigid tissues becoming relaxed, labor progressing satisfactorily, and the general restlessness of the patient being allayed. A dose of one dessertspoonful, followed if necessary by a teaspoonful every half hour, usually does away with the necessity of dilatation, if there is no mechanical obstacle, such as the presence of a tumor.

Dr. Kelmer reports the case of a girl aged twelve who had eczema involving her ankle and it was attended with a degree of pruritus that almost drove her wild. She scratched her ankle until it bled and still she got no relief. After she had tried a good many domestic remedies she applied for treatment. Noitol was applied four times a day as above directed. From the first application the itching subsided and after the first day the color of the affected parts showed that improvement was beginning. He thought this girl should have some internal medicine for her blood and one that would exert a tonic action on the skin. She was accordingly given calcium and bromide compound (Wheeler's). This girl made a speedy recovery and has now gone several months without any recurrence of the disease.

Aletris cordial, Rio, is an emmenagogue, not abortifacient. It cures congestion of the uterus and ovaries, and favours the occurrence of the menstrual discharge. It is also appropriate when the amenorrhea depends upon anaemia. It regulates menstruation, and is useful in all the derangements of menstruation, namely, amenorrhea, dysmenorrhea. and metrorrhagia, provided these disturbances be idiopathic. By curing menstrual disease, a common cause of sterility, it will also cure the sterility. It is also recommended in erosions of the cervix and vulvar eczema.

P. Chester Madison, M. D., specialist in nose and throat, Chicago, Ill., reports the following case. "Willie N., kindly referred by Dr. G., having had the regular treatment for diphtheria, without relief. By the use of antitoxine, and direct application of glycothymoline undiluted, patient made rapid recovery. I have also found it very effective in all cases of subacute and chronic nasal catarrh, ulcerated and cankered sore mouth."

In cases of nervousness due to menstrual disorders, I find neurilla a splendid remedy. I have used it in a case of nervousness at the menopause, and find it acts as a true nerve calmative, controlling mental apprehension to some extent, and also relieving physical discomfort.—H. T. Johnson, M. D., Fredricktown, N. J.

The Wisconsin Medical Recorder.

A Monthly Journal of Medicine and Surgery, Devoted to the Best Interests of the Whole Profession.

VOL. VI. JANESVILLE, WISCONSIN, NOVEMBER, 1903. NO. 11.

LEADING ORIGINAL ARTICLES.

PRACTICAL ELECTIVE SURGERY FOR THE GENERAL PRACTITIONER.

By Charles C. Miller, M. D., 100 State Street, Chicago, Ill.

(Continued from page 232, Oct. Recorder.)

COMPRESSION.

As a means of hemostasis, the pressure of a gauze pad is oftentimes of great value. When an incision has been made and a vessel cut which commences to bleed freely, a pad of gauze can be pressed into the wound and so held until a hemostat can be secured and the operator or assistant is ready to grasp the vessel.

Again we are sometimes caught in a dissection by our wound being flooded from cutting a large vessel. We can pack the wound with gauze and by compression prevent bleeding until we have enlarged the wound so that the bleeding point is accessible.

We have another most valuable means of utilizing compression which should always be kept in mind. Where we have a very large vascular tumor we can sometimes commence a rapid incision beneath it forcibly tipping it away as we cut, and at the same time an assistant is to quickly follow our knife with large flat pads compressing the raw surface left by the removal of the tumor. When the tumor is out of the way, we can begin at the margin of the pads raising them and clamping any bleeding points we meet. In this way a huge sarcoma of the breast can be amputated in from sixty to ninety seconds and the pads raised and hemostasis completed in five minutes. With the old technic of the past the operation would last from forty to sixty minutes and be accompanied by the loss of much blood.

In some cases it will be of advantage to remember that we can temporarily control a spurting vessel by placing our finger upon the point from which the spurting occurs.

CLAMPS.

Large clamps are useful in some operations to clamp tissues en masse.

The angiotribe is a particularly heavy clamp so made as to crush the tissues, thus sealing the vessels.

HEAT.

The use for hemostasis of heat will be limited. To control oozing and small vessels hot compresses will

prove of utility in a few cases. The water should be as hot as can be comfortably borne by the hands. Compresses will be of more value than irrigations in most operations.

STYPTICS.

These agents have but small place in modern surgery. In open wounds other measures are more effective. In cavities and canals of the body astringents will in a few instances prove of value. The active principal of the suprarenal gland has had much said in its favor as a hemostatic during the last few years. In free hemorrhages from large vessels, it will prove useless. In hemorrhage from diseased vessels it will also fail in some instances.

THE ACTUAL CAUTERY.

This will prove to be a valuable means of controlling bleeding from small and large vessels. The cautery is to be used at a red heat, and will quickly seal the vessels. If swept over tissues just long enough to cause them to close and not continued, we will have no sloughing of the parts and healing will be in all respects satisfactory.

Other methods of hemostasis have been practiced in the past, but they are not given attention as they will be of little if any value to the practitioner.

INCISIONS.

Before the introduction of asepsis, it was of considerable importance to follow the course of muscles in operating on parts of the body owing to the infrequency of primary union. If a muscle was cut across, its ends retracted and separated, when healing occurred the function of the muscle was much interfered with. Now we can divide muscles with impunity in a clean operation, as buried sutures and primary union will in a short time give us a condition equal to that before operation. The direction of the incision and its location has thus diminished in importance. So with the length of an incision. We now secure free access to a part knowing that a long incision heals as quickly as a short one. The division of blood vessels has now come to be of much less importance than previously, owing to our ready means of securing them.

Nerves are to be kept in mind. In a few instances we can do considerable harm by dividing a nerve trunk. If acquainted with the location of a nerve, we can divide it during an operation and then suture it with success in many cases.

The scalpel for operation should always be sharp. Much more accurate work can then be done. Scissors will prove very useful in many operations, neater incisions are possible in loose tissues and less hemorrhage is excited.

BLUNT DISSECTION.

This method is a favorite with many operators. It is merely a modified name for tearing. It is to be used only in very exceptional cases. A clean cut is followed by less disturbance to the tissues, and consequently better repair is possible.

MUSCLE SPLITTING OPERATION.

In opening the abdomen, it has been recommended that the blunt separation of the layers of the abdominal wall has advantages over a clean cut. The operation is only likely to result in considerable laceration of the tissue of the wall, and gives a much poorer access to the cavity. The giving way of the tissues is along the lines of least resistance, and there is often a considerable tearing of fascia. This when followed by infection will

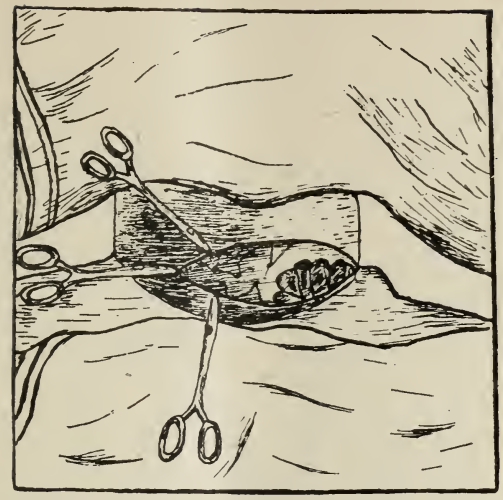


FIG. 5.

Fig. 5, cut shows operation for goiter in which inferior thyroid vessels have inadvertantly been wounded in trying to dissect under the lower angle of the growth on the left side. Bleeding here is profuse and the wound so flooded as to make it impossible to secure the vessel. Gauze is packed into the wound as in illustration and the parts left until the whole upper part of the tumor has been freed and only the lower border remains attached toword the right of the patient. Now the tumor is easily dislocated to the right and perfect access secured to the vessels which have been controlled by the gauze pressure. In thyroid operations where a portion of the gland is to be removed operators should continue their dissection until the capsule of the gland is exposed. An attempt at separation of the gland otherwise will be a bloody task. Where the capsule is exposed the gland can be removed without great difficulty, all vessels being readily secured, the only hemorrhage being from vessels accidentally torn or wounded.

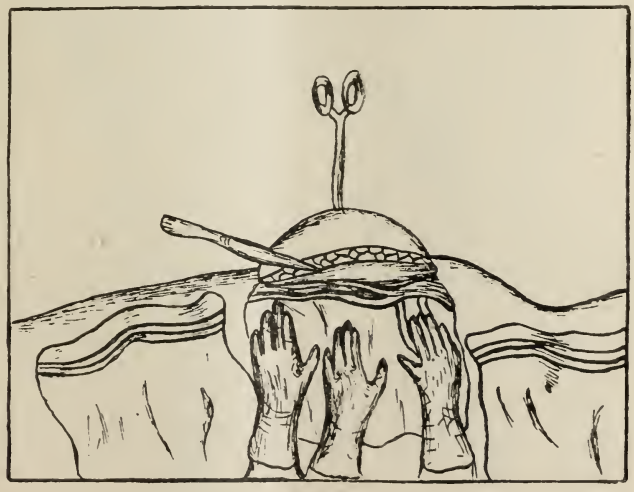
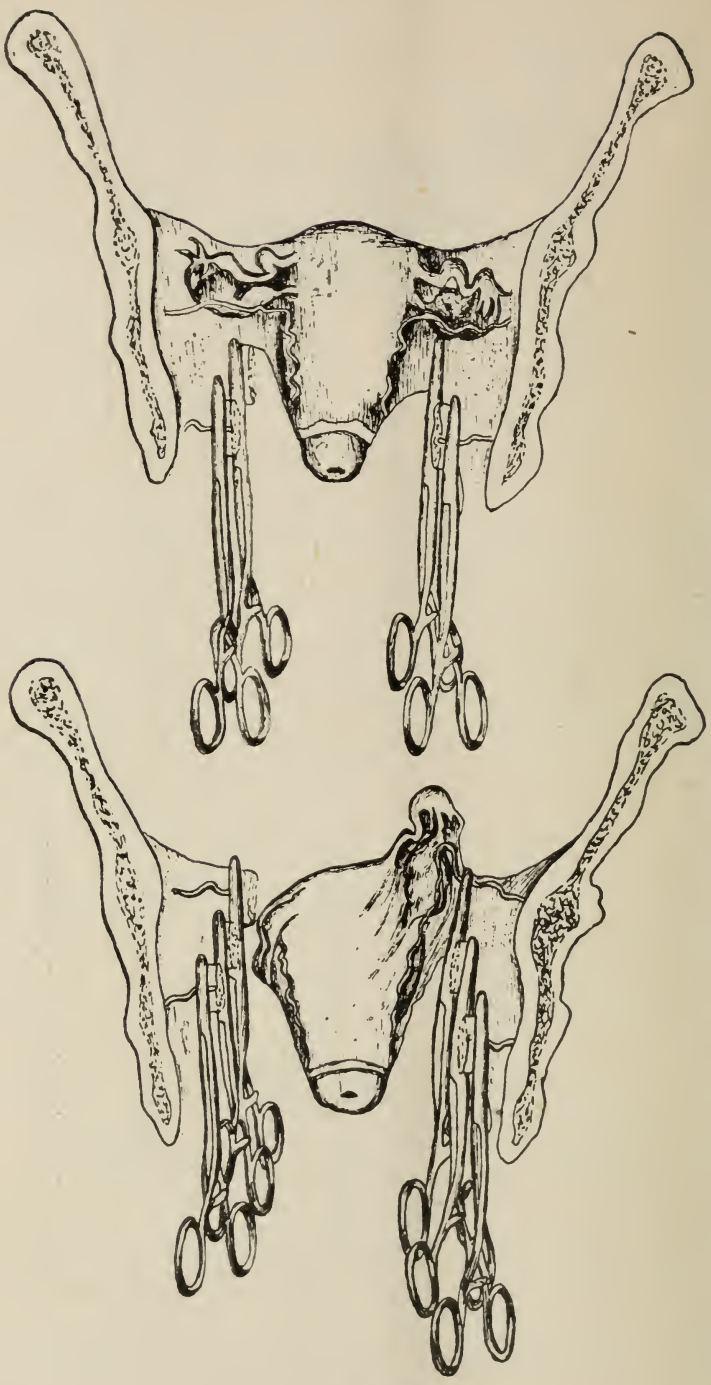


FIG. 6.

Fig. 6 illustrates a means of compression used on a large scale for temporary hemostasis. A breast is being amputated. While the organ is rapidly cut away large thick compresses are pressed close after the knife. They are held in place by the pressure of flat outspread hands. All vessels are thus occluded, the breast when exceedingly vascular can be cut away in a few seconds and temporary hemostasis will prevent loss of blood. The edges of the pad can then be gradually raised and large vessels caught with hemostats so commonly used at the present day. This method is applicable to other parts where a large vascular surface is exposed by operation.



FIGS. 7 AND 8.

Figs. 7 and 8—Large clamps take a prominent place among the instruments of modern surgeons, but their indiscriminate use is not to be commended, as by crushing and dentalizing large masses of tissue they can interfere in the healing and predispose to the development of infection. They were first popularized by the pelvic surgeons, in which class of work they are peculiarly useful.

In vaginal hysterectomy, where the clamps are applied as in cut and left on for a number of hours the uterus should be forcibly draw downward so that the clamps will rest in the vagina if possible rather than high in the pelvis.

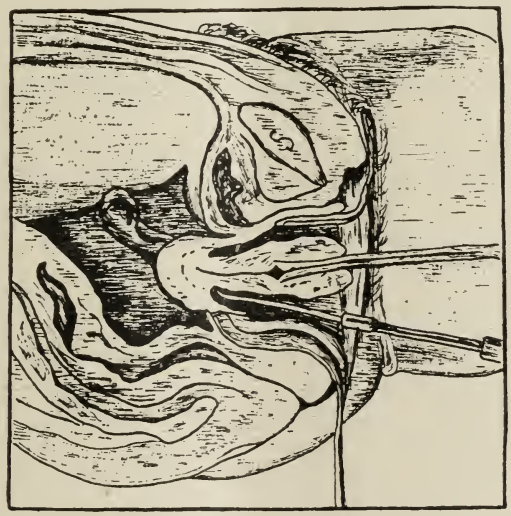


FIG. 9.

Fig. 9 illustrates how effective the cautery may prove in proper cases. Here a carcinomatous cervix is being removed and hemostasis satisfactorily accomplished by this means.

In diseased tissues the cautery will prove invaluable. Here ligatures would not hold unless set far out in healthy tissues, and then it would be impossible to close all vessels running into the diseased organ. Here we merely have an operation performed to relieve the suffering of the patient to some extent. Where hope is entertained for the complete removal of the growth hysterectomy is chosen in preference. Many practitioners will have an opportunity to use the cautery in the way depicted above. They can remove only the protruding ulcerating cervix or if they choose make the operation quite radical as the cut illustrates. In either case much relief is invariably afforded the patient for a time.

result in not a few cases in sloughing. The separation, too, of the tissues will be accompanied by the formation of irregular interspaces in the abdominal wall which will facilitate the burrowing of the pus. This incision has practically no place in the surgery of the abdomen in the absence of pus, as in such a case the clean incision will heal satisfactorily. The cut directly through the parts is followed by a better exposure of the field.

(To be continued.)

AN UNUSUAL OBSTETRIC CASE

By E. N. Ritter, M. D., Williamsport, Pa.

The following case is a rare and interesting occurrence. Mrs. B., age 33, III-para. First labor normal, child eight years of age, living and healthy. Two years later had a very difficult instrumental delivery of a hydrocephalic child. Had a puerperium of three months attended with fever.

Six years now intervened before pregnancy again occurred. I was engaged to attend her during this confinement. As her gestation presented no unusual symptom, no local examination was made until Nov. 25, 1902, when I was summoned to her home. She stated that the two previous days she had a light continuous watery discharge, but now it had changed to a bloody color. She had no pains except two weeks previous, complained of a bearing down feeling which was relieved by macrotys. On examination I found the whole vaginal uterine segment perfectly smooth. As I could detect no cervix or os, and the expected termination of pregnancy was about Dec. 1, I gave her a single dose of quinine (grains six) and macrotys in small and frequently repeated doses.

Nov. 26, the same bloody discharge continued with no change on vaginal examination. I asked to bring a consultant, which was granted and who found a similar condition.

Nov. 27. Condition about the same except some feeble labor pains. A second consultant was now called, who declared there must be an os, but his examination failed to find it. Patient was then anesthetized and a more through examination was made with a speculum, but the whole lower uterine segment presented a perfectly smooth surface without any opening. I then punctured the uterus at its thinnest place and where the os probably would have been if present. A dirty bloody discharge escaped from the uterus. The artifical os was mechanically dilated and pains for a short time occurred more or less regularly but finally grew weaker. Instead of the normal circular dilatation the artificial os presented an oblong opening, producing an anto-posterior tear. As the patient was becoming exhausted and there was sufficient dilatation to admit the application of forceps, I again sent for my second consultant He arrived at 4 p. m., and we decided to give an anesthetic and terminate the labor. The dead fetus was easily delivered with forceps. The laceration was repaired with fine silk sutures, leaving an opening sufficiently large for the free escape of the lochia.

Convalescence normal until the sixth day when the temperature rose to 102° and pulse 128, but the following day the temperature dropped to 99° and the pulse to 84.

On the fourth day of the pueperium, her only living child who occupied a cot at night in his mother's room developed diphtheria. The mother was at once removed to another room with the above symptoms resulting. On the tenth day I removed the stitches, but there was only partial union of the laceration.

I made an examination at the end of four weeks, found the cervical portion of the uterus nearly absent. There was a good sized external os which presented a better appearance than many other cervical lacerations I have seen. I have read of the cervix being occluded, but never where the os was obliterated at the termination of a pregnancy.

PHYSICS OF THE X-RAY.

By Dr. Gordon G. Burdick, Chicago, Illinois.

Chief Surgeon People's Hospital; Professor Radio-Therapy and Photo-Chemistry, Illinois School Electro-Therapeutics; Associate Professor Surgery, Post Graduate Medical School; President Chicago Electro-Medical Society.

(Continued from page 334, Oct. Recorder.)

Before considering the disturbances outside of the X-ray tube, it is necessary to have a better understanding of the medium with which it is surrounded. It has been recognized from very early times, that this world received, and depended upon the energy received from the sun, even the early physicists could not conceive of energy traveling 90 millions of miles of space without some medium to convey it, while they could not recognize the character of this medium, by mutual consent it was called:

The Ether.—This intangible substance, or rather lack of substance which made many of us lose many nights sleep, trying to understand it, and get it in such shape that our minds could grasp it, and after putting in about two years of hard work, was still to our minds the same as it appeared to the early investigator, intangible. We all recognized the limitation to the teaching description. That it was a homogeneous jelly like material, structureless, but pervading all matter and space, capable of transmitting motion, in form of waves, of different wave lengths; a disturbance taking place at the same point was carried by means of waves to the remotest end of space, as it is only within the last five years that scientists would concede that there is no end to space.

It was discovered that energy of different kinds would impart different forms to the ether, and each form of motion attended by different phenomena, rendering each form of motion characteristic.

This medium that offered so much difficulty to the student and scientist alike, has, since the discovery of the X-ray, resulted in the discovery of the ether; and it has taken on a pulsating, tangible form, that even a simple mind can grasp.

The ether has been replaced by the negative corpuscles. It will be necessary for us to study these bodies, in order to understand the different forms of energy derived from space.

These particles are extremely small bodies, about 1000th times smaller than the atom, and go to make up the primordial dust, with which the creator wrought.

These bodies are so small that they are capable of passing through nearly all forms of matter; and in fact unite by means of a central positive ion, in the presence of a catalytic substance, in different proportions, to form the different elements, that make up what we call matter, and combination can take place only in the presence of some form of motion, as heat, light, or electricity. In order to create we must have time, space, matter, and motion, and if we will revert back to that wonderful scientific book, the first in our bible, it would bother a modern scientist to give a better description of creation then we have: "In the beginning," time, "The earth was without form and void",

space and matter; and, "the spirit of God moved upon the waters," energy. From the dust of the earth, God created man, and breathed into his nostrils the breath of life. It is this dust that is now called the negative corpuscles, which have replaced the ether of the early physicist, and has become a reality to the scientific mind today, and the problem of creation of elementary substance, is only a short space in the future; as under proper proportions, environment, and the application of energy the alchemist's dream may come true, and gold become so common that it may be used for kitchen utensils.

It might be well to consider the properties of these minute but potential bodies upon whose presence life depends.

These corpuscles normally have a negative polarity, and under the well known laws of electricity a charged body is moved when approached by another body containing a charge of either polarity, either toward or from the disturbing power.

These corpuscles pervading all space and matter, are kept in constant motion by the varying polarities taking place in the known and unknown universe.

The terrific transformation of energy taking place upon our sun, the inconceivable hurricane of metalic winds, give rise to enormous electro-magnetic disturbances, that prevent the corpuscles from ever resting the fraction of a second, and produce motion sufficiently violent among the corpuscles to produce waves of varying wave lengths, which is interpreted by the human senses, as heat and light, and by chemical means as beyond the ability of human sense, these waves should be interpreted literally as a period of vibrations. The furious conflagration constantly going on in the sun gives rise to rhythmical disturbances in the corpuscles that give the planets a constant supply of heat and light, appearing only as light when it reaches our atmosphere, where the movement of the corpuscles is diminished, producing flourescent effects, that we call light; without the atmosphere we would have no light, as the corpuscles can vibrate without collision and flourescent effects are wanting.

Corpuscles are attracted towards a positive polarized body at an enormous rate of speed, and having the property of changing their polarity to a like polarity when brought in contact with it, under the well known law, that like poles repel, are immediately shot off from the same body at an inconceivable speed.

NOTE.—Queen & Co. desire it to be known that Mr. Sayen developed the tube in their laboratory while in their pay, and in consultation with their workmen and they desire it to be known as the "Queen tube". All my information was to the contrary, but interested parties should know best.

(To be continued.)

NOTES AND PRESCRIPTIONS.

By J. A. Burnett, M. D., Brawley, Arkansas.

Ipecac is a glandular stimulant through the spinal system. It is a very good substitute for calomel, especially when used as follows:

℞ Pulverized ipecac
Pulverized extract aloes
Menthol
Camphor, aa., gr.xx
Strychnine nitrate, gr.j
M. Sig. Divide into twenty doses and take one before each meal.

Ipecac is of much value in diarrhea, dysentery, nausea, constipation, pneumonia, active forms of hemorrhage,

especially hemorrhage from the lungs and irritative cough with deficient secretion. It is also very often indicated in intermittent and remittent fever.

Either one of the following four formulas are excellent laxatives:

NO. 1.

℞ Soda bicarbonate, 168 parts
Tartaric acid, 150 parts
Rochelle salts, 50 parts
Epsom salts, 60 parts
M. Sig. Dose one or two teaspoonfuls in a glass of water.

NO. 2.

℞ Potassium and sodium tart, gr.xx
Potassium bicarbonate, gr.viij
Sodium phosphate, gr.viij
Magnesia calcined, gr.viij
Citric acid, gr.viij
M. Sig. Dose, twenty-six to fifty-two grains in a glass of water.

NO. 3.

℞ Dehydrated sulphate of magnesia, ʒj
Citric acid, ʒj
Tartaric acid, ʒiij
Bicarbonate of soda, ʒiv
M. Sig. Dose, one tablespoonful in a large glass of water, the dose to be repeated if necessary inside of an hour.

NO. 4.

℞ Sodium phosphate, ℥x
Citric acid, ʒj⅓
Sodium nitrate, ʒiss

Thoroughly triturate the sodium phosphate and the citric acid in a mortar; they will soon begin to liquify, but an ounce or two of water can be added, which will make them liquify much quicker. After they have become liquid enough to pour into a bottle place them in a hot water bath until they dissolve and if they do not make as much as ten ounces add water sufficient to make it do so. One teaspoonful will contain about seventy grains of sodium phosphate.

No. 4 is an excellent way to give sodium phosphate. All should be familiar with sodium phosphate. It is a very useful remedy in torpidity of the liver, bilious headache, dizziness, etc.

Three drops of Monsel's solution given every fifteen minutes in half a glass of water gives good results in hematemesis when due to gastric ulcer, cancer or other severe stomach diseases.

In enuresis and convulsions of children as well as many other diseases never forget to examine the penis of boys and the clitoris of girls for preputial adhesion unless you know such does not exist.

Never forget to dilate the rectum in all cases of sudden suspended animation. Dilate by inserting both thumbs and pressing outward around the entire orifice.

ENDOCARDITIS.

OTHERWISE KNOWN AS BOUILLAUD'S DISEASE.

By F. Silsby Tripp, M. D., Pleasant Hill, Ky.

Life depends upon the even flow of the vital fluid, as through it we obtain the nutrient principles of the food we eat, the oxygen of the air we breath and absorb through the pores.

The history of endocarditis is limited to modern writers; the clinical record of ulcerative endocarditis is of recent date, its literature scarcely extends back forty years.

The left side of the heart is more prone to diseased conditions, as more stimulating blood passes through the orifices, and greater heart strains are

required to accomplish the systemic circulation. Also, the greater amount of fibrous tissue around the aortic and mitral valves renders them most susceptible to inflammation.

Inflammation of the endocardium is to the physician and examiner, a subject of great importance. The lining membrance of the heart, and the valves pre-emiently constitute the locus minoris resistentiae of the endothelial vascular system.

It is known at all ages, in both sexes, and under different conditions. In intra-uterine life it occurs principally on the right side, and is a cause of malformed heart later in life. It is rare in infancy; quite common after five years. Up to 40 years, females are most subject; over 40 years males predominate.

Acute inflammatory processes involving the endocardium, are not by any means easy to diagnosticate; there are no pathognomonic symptoms. Acute inflammation does occur idiopathically, but as a rule as a secondary process. The subject of chronic endocardial inflammation forms the chapter of chronic valvular heart affections which is too comprehensive a part of endocarditis to be here treated of.

The Pulse:—Of our means of physical examination and interpretation of symptoms, the condition of the arteries is of first importance. The pulse is felt by placing the first two fingers upon the artery at the outside of the arm, with the second finger towards the heart. The force of the heart is determined by pressing with the second finger and noting how much force is required to compress the artery so that the pulse cannot be felt by the first finger. The pulse is controlled by the ganglionic nerves. A quick pulse always accelerates a rapid respiration; the pulse rise will also cause the temperature to rise in the usual proportion of one degree for every ten beats increase in the pulse rate. As the pulse is quickened, we may judge of the local lesion. A high temperature will always denote a molecular death at the seat of disease. The intermittent pulse is indicative of functional or organic disease. The irregular pulse is generally found in heart disease.

The dull, expressionless pulse is the pulse of local congestion. A small pulse, with loss of a beat, attended by weakness and a tired feeling of the left arm refers to the cardiac plexus. A short wave, as though a lump of blood quickly passed under the finger, shows wrong, usually of irritation of ganglia, and in a weakened condition, it denotes danger.

Acute endocarditis we consider under two headings:—Simple or exudative endocarditis, and pernicious, ulcerative or diphtheritic endocarditis. To distinguish at times the line of demarkation is difficult, as the one often passes into the other.

ETIOLOGY.

In the delicate endocardium of a child it is highly probable the vegetations of a simple papular endocarditis may be initiated by the palpitation due to a sudden fright.

The specific inflammatory irritant, acting mainly on the valves, is the superheated blood of the fever patient. as marked by the intensity of the fever, besides the poisoned condition of the circulating fluid. The friction of the mitral valve edges on each other probably first causes them to suffer.

Often endocarditis is a first manifestation of rheumatism; more often it is a secondary complication. The rheumatic fevers in the young, an overworked condition of the body and mind, anxiety etc., too little rest in middle life, are causes. Ofttimes it is associated with chorea, and is the one

complication that the ever watchful physician is on the alert to discover. That endocarditis may be produced by emotional disease has been observed a large number of times in chorea. Such cases give, on examination, an apical or basal murmur, which at times becomes permanent, and in others passes away. Strain is a factor after 40 years, especially affecting the aortic valves.

As pathological antecedents accounting for secondary endocarditis may be mentioned:—Acute rheumatism, chorea, tonsillitis, whooping cough, scarlatina, gonorrhoea, rarely small-pox, typhoid fever, pneumonia, pleurisy and tuberculosis. Pneumonia heads the list in the malignant form, rare are tuberculosis, typhoid and diphtheria, small-pox and scarlatina. We have the septic type in connection with an external wound, puerperal fever, or an acute necrosis.

MORBID ANATOMY.

The endocardial inflammation may affect any part of the membrane, but in extra-uterine life, usually the valves of the left side, mitral more often than the aortic. Although the endocardium has no vessels of its own, the capillaries upon the cardiac walls are in contact with it. The arrangement in the valves is different, as only a few vessels ramify between the layers of the mitral, and none are found usually in the sigmoid. In inflammation new vessels are formed in the mitral valve or those that exist become more apparent; in the semi-lunar valves, new vessels are formed or the neighboring capillaries send out prolongations to parts destitute of blood vessels. Mural endocarditis is seen most often at the upper part of septum of the left ventricle; next on left auricular nostero-external wall. In children the relation of the heart to the chest wall is high. In women who lace the lower boundary of the heart may be higher than normal. In women with large flabby mammae, whose nipples are at no particular point, it is a good idea to draw a vertical line down the center of the sternum, and from this measure two inches outwards in the interval between the fifth and sixth ribs, on the left side; there the apex beat ought to be found. Fibrinous clots in the heart or its vessels used formerly to be taken for polypi; the morbid anatomy in this form, endocarditis polyposa, is really the ulcerative inflammation, in which there is an excessive deposit of fibrin, producing polypoid masses.

Inflammation of the endocardium occurs principally on those parts of the valves opposed to the currents of the circulation, vidilicet, on parts exposed to the friction of the blood. The ulcerative charges lead to perforation of a valve segment, erosion of the chordae tendinae, perforation of the septum or even of the heart wall itself.

If the blood penetrates a rent in a flap, the endocardium is puffed out and a valvular aneurism is formed; it is a round or funnel shaped aneurismal sac and may project from the valve. When there is obstruction to the circulation, as in all cases of stenosis and valvular insufficiency, the tissues not being supplied with the necessary quantity of blood for even normal wants, communicate with the brain a complaint of this privation, whereupon it withdraws a portion of its inhibitory control from the heart, allowing it to perform its extra work, which results in hypertrophy. This is principally taken on by the ventricles and is always consertative. It may continue indefinitely or it may be followed by degeneration and dilatation. So long as hypertrophy predominates, the circulation will be carried on. Enlargement with hypertrophy and dilatation is a common consequence of endocarditis with valve lesion. In regurgitation from

valve insufficiency, dilatation is to a slight extent conservative. When dilatation exceeds this, signs of embarrassment to the circulation supervene, and cardiac insufficiency is induced. Dilatation the result of muscle degeneration is always injurious.

PATHOLOGICAL CHANGES.

The changes wrought in the endocardium by the inflammation first consists of an extensive growth of new connective tissue cells beneath the endothelial layers; this results in small masses of granulation tissue upon the valves or endothelium of the heart walls. Upon these is deposited fibrin. There is no exudate upon these so formed wart like excresences called vegetations, but the coagula are a deposit of the fibrin of the blood. The papillary elevations become filled with fluid, whose chemical properties resemble mucin.

Micro-organisms probably constitute an essential and constant element in endocarditis.

Near the insertion of the tendons upon the surface of the mitral valve are found irregular wreathes of vegetations, which enclose the attachment of the chordae tendinae. The chordae tendinae may become softened and rupture, or may adhere to one another. Such adhesions with agglutinization of the flaps to each other or the heart wall account for the ensuing stenosis or regurgitation. The endocardium is not swollen in the vicinity of the vegetations. These vegetations may undergo hyperplasia or sclerotic changes, leading to chronic valvular disease. These growths detached from their site and passing into the circulation form emboli. The growths may degenerate and become impregnated with the calcium salts in gouty persons. Excessive hyperplasia may lead to fatty metamorphosis; this breaking down leads to ulceration.

In the malignant endocarditis the action is more virulent. We may have distinct foci of necrosis, or a suppurative action, little abscesses forming beneath the warty growths, to discharge the purulent collection into the circulation. The vegetations present a remarkable greenish-gray or greenish-yellow color. According to Rene and Pere the bacillus of infectious endocarditis cultivated on gelatine has a beautiful green color. The organisms cultivated from the vegetations includes the streptococci and staphylococci; next most common micrococcus lanceolatus, bacillus typhi abdomalis bacillus tuberculosis, gonococcus and bacillus anthracis.

Emboli lead to infarcts red or white, simple or of a suppurative character. In many cases innumerable miliary abscesses form. The embolus may be of large size and obstruct the large vessels of a limb; this may superinduce gangrene. The emboli if benign are not so serious; thus in hemiplegia the result of exudative endocarditis, we seldom have fatal results. Swelling of the viseera result from embolic occlusion of its circulation. Tuberculous inflammation of the endocardium supervenes at all ages. There is no special symptomatology. The endocardium may be reached by direct propagation from extra-cardial changes involving the myocardium, as from tuberculous bronchial glands.

MURMURS.

Heart sounds undergo modification as soon as the tissues of the valves become changed in texture, substance and shape by the inflammation. The heart sounds are softer in quality, not superficial, and synchronous with the motion of the heart. Change of position does not change the pulse rate. Preceding the appearance of the murmur the hearts action may be quickened and arythmatical, or in-

stead of distinct murmurs, a roughing of the first sound this may disappear when the patient sits up; later they persist. It is possible though rare for an endocardial murmur to be located so far from the valves as to cause no blowing sound. In the ulcerative form of the malady, the murmurs change from day to day; this is characteristic. Cardiac murmurs must not be confused with those heard at the apex in cardiac dilatation, or the murmurs heard during the course of fevers, or the murmurs of anemia which may rapidly develope. Pain is frequent in heart disease without valvular lesion. Pain is a symptom of greatest prominence in aortic lesions; it is least experienced in mitral disease.

LESIONS OF THE VALVES.

In endocardial inflammation the mitral valves suffer most, and the effects are long lasting. In the first stage of mitral stenosis, when the valve segments are yet capable of closure without regurgitation, there is no murmur, but only a prolonged first sound due to thickening of the segments, or a partial want of synchronism in the sounds produced by the two sides of the heart. Accentuation of the second pulmonary sound is heard, which however is common to all forms of cardiac disease. Accentuation of the first, and a redupliation of the second sound in the mitral area occur in about two-thirds of the cases. The apical presystolic sound is present in one-half of the cases; a diastolic sound in four-fifths. The apical systolic sound is not conducted to the back. There is great frequency of diastolic murmurs in mitral stenosis. Over the mitral area a rough vibratory sound is heard, with a thrill on auscultation and palpation. We have stated that mitral murmurs may exist singly or together; they usually persist, with the subsequent development of chronic valvular disease.

In Aortic Lesions.—We do not have dyspnoea; neither dropsy, unless there is cardiac enlargement from dilatation. They involve distress which is described as palpitation, or a sense of discomfort referable to the precardia; the suffering may be great.

In Aortic Insufficiency.—A diastolic murmur, a soft, long drawn bruit is heard. Pulsation of the large arteries of the neck and upper limbs will also be observed.

Tricuspid Lesions.—Here we have a feeble, irregular action of the heart. Tricuspid incompetency is secondary to mitral stenosis. Intense orthopnoea, palpitation, oedema and cyanosis. The jugular veins are distended. The physical signs would reveal a soft murmur at the ensiform cartilage, previous to the appearance of which a rough presystolic murmur and thrill at the apex would have been evident. In the larger nnmber of cases of mitral stenosis there is to be found a systolic murmur in the tricuspid area.

CLINICAL HISTORY.

Simple Endocarditis.—The prodromal symptoms are latent; there will likely be no evidence of cardiac disease, There will be some fever; in a case of chorea, endocarditis will be kept in view in considering obscure fever, Some degree of prostration will be evident; uneasy feeling in the cardiac region, not absolute pain; restlessness, hardly nausea, respiration tends to be labored, but not exactly suffocative. This occurs during rheumatism or convalescence, and the rise of temperature is not accompanied by an exacerbation of symptoms. There may be some palpitation, increased frequency and irregularity of the heart's action.

Physical Signs Are Invoked.—Endocarditis affecting the wall of the

heart in children, cannot be recognized. There is at first no murmur, no dilatation, or hypertrophy from the endocardial inflammation. The murmur of endocarditis has been called the paradox bruit. These symptoms may last a week or so and pass away. By the third or fourth day the soft blowing systolic murmur at the apex is heard, with accentuation of the second pulmonary sound. The duration may be from one to three weeks the febrile symptoms subsiding in a few days, the heart trouble slowly. Dilatation with insufficiency of the heart may supervene; this complicating other diseases is recognized by physical signs. The termination may be fatal in a few weeks by rapid, acute dilatation, cardiac insufficiency, dropsy, cyanosis, and often pulmonary complications. Obstructions of the systemic nervous circulation from valvular disease produces congestion of the spleen, liver, kidneys, peritoneum and general dropsy, of the pulmonary veins, congestion of the lungs, pneumonia etc. The embarrassed pulmonic circulation induces dyspnoea, orthopnoea, cough, profuse expectoration, perhaps bloody. Advanced mitral or aortic disease occasions obstructive congestions of the viscera as above portrayed, haemoptysis, hematuria, anasarca, cyanosis, irregularity of the pulse, syncope etc. Pulsation of the jugular veins indicates mostly secondary disorders upon the right side, with regurgitation into the venae cavae. There is no more terrible picture of suffering and distress for the physician to treat than that of advanced heart disease.

Malignant Endocarditis.—As the products of inflammation spoil the blood, another class of symptoms supervene. Rigors appear, increased heat of the skin, profuse perspiration, ever and anon recurring. The skin becomes dull and earthly, of a yellow color (not the conjunctiva) and the expression becomes more or less pinched and anxious.

Between pyaemia and malignant endocarditis there are no differential features; this is an arterial pyaemia. We do not place too much reliance upon the temperature in diagnosing septic infection; pulse is a safer guide, as a case of sepsis will always present a quickened pulse; often there will be no elevation of temperature; a rapid pulse, headache, a foul tongue, dry, hot skin. The intermittent fever has been taken for malarial. The fever is irregular and of a low type; the sweats may be as profuse as those in phthisis or ague. Ulcerative endocarditis is rare in childhood. It is rarely primary, but complicates infectious diseases or septic affections. Also, it is generally engrafted on previous valvular diseases. It is seen more frequently in pneumonia than any other disease; with chorea it is rarely associated. The disease runs it's course in a short time; death may occur on the sixth day. There are certain embolic general features, towit: delirum, coma, or paralysis from involvment of the brain or its membranes. Pain in the side and acute peritonitis from infection of the spleen.

Suppuratiou and gangrene from disturbance of the circulation. In some instances the cardiac symptoms are most prominent in others those referable to the cerebro-spinal system. The petechial rash resembles typhoid or cerebro-spinal fever or haemorrhagic small-pox. Parotitis may occur. The typhoid form is the most common. The heart symptoms may be overlooked; sometimes there is no cardiac murmur. In nearly all cases splenic infarcts are found; embolic pneumonia is present. Renal pains and bloody urine, septic diarrhoea, are all easily understood by the lodgment of infected emboli and purulent release of the endocardial abscesses. Examination of the blood excludes all forms of malar-

ia, and should certain other specific diseases likewise. In this form of endocarditis retinal haemorrhages are almost invariable.

PROGNOSIS.

In young persons remarkable recoveries take place. Often adaptation of the heart and general symptoms by degrees is effected, so that quite good health and even capacity for exercise may be attained, while physical signs remain. Mitral disease is much less serious than other diseases of the heart. Possibly the adverse prognosis of mitral disease affecting pregnancy has been overestimated. A heart murmur, which is without doubt due to structural disease of valves, need not necessarily be considered an impediment to life. If the same can be traced to an acute malady it need not be so adversely prognosticated, as where no acute illness has been recorded. Other things being equal the danger of sudden death is in proportion to regurgitation at the aortic orifice, and weakening of the left ventricle by dilatation. In mitral diseases overfilling of the left ventricle exposes the patient to paralysis of the heart and sudden death. A murmur resulting from degeneration, without any history of heart disase, is much more significant. In seemed that persons with incompetency died at a later age than those with stenosis. Further, there is always danger of recurrence in endocardial inflammation of the valves, The great danger as far as life is concerned, is the introduction into the general circulation of septic material produced in the inflammatory parts by the action of microbes in the tissues.

Cases of ulcerative endocarditis are usually fatal, due to exhaustion or some embolic process. Jaundice is seen in rapidly fatal cases.

LIFE INSURANCE.

One company takes position that persons with heart disease are subjects for insurance. A careful study of each case is exacted by the company's medical book of instructions. In no other of the examination is the skill of the examiner further put to the test. His judgment in physical signs on auscultation, in practically healthy people have led to the conclusions that such peculiarties are not to be considered as always indicating grave or even slight structural changes. For instance, a simple heart murmur being found would of itself hardly entitle an adverse opinion. The evidence of embarrassment of the heart in connection would be additional data; if associated with hypertrophy, displacement of apex beat, or peculiarities in the pulse, would entitle to a guarded opinion. The difficulty is often so great as to leave the medical examiner no alternative but to postpone. Later, not accounting for a heart murmur by any but functional troubles; or again to a heart trouble that remains free from embarrassment, the recommendation may be made to accept with an increased risk.

WORTH REMEMBERING.

By J. A. Burnett, M. D., Brawley, Arkansas.

An application of methylene blue gives good results in tonsillitis.

Infusions of most organic remedies give far better results than in any other form they can be used.

Lobelia leaves mixed with warm (not hot) goose oil and applied to the chest while warm is of much value in many lung complaints.

DISCUSSIONS.

This Department contains each month case reports, letters, inquiries and replies from our readers. If you have a case you would like some help with, or a question to ask, write to us and we will publish it in this Department and you will get the opinions of our medical brethren. When you have an interesting case, write a report of it and send it in and it will help some one else. We need each other's counsel so let us help each other from our experiences. Letters are desired from physicians on any subject pertaining to our profession.

THERAPEUTIC NIHILISM.

When a medical writer in outlining the treatment of a given disease devotes most of his space to the surgery of that disease which we assume has a medical side, we are lead to believe that in practice he is more of a surgeon than a physician. Usually we observe in the surgery-favoring doctor a therapeutic nihilist, more or less.

There is in most of our text books but little attention given to the medical aspect of senile enlargement of the prostate gland, yet in fifteen years of practice I have helped all cases medically and cured more than half, and even those I have not cured have in some cases gone uncured because they did not stay with the treatment.

Some ten years ago I was compelled to leave a catheter in a patient of this class for four days, yet he is alive now at 80 years of age and free from prostatic trouble.

Another old gentleman of 70 I used the catheter with for a week four years ago. The other day he told me he had been all right since. I could repeat many instances similar.

Here is an outline of the treatment:

℞ Saw palmetto, fl. ext., ʒv
Oil of sandal wood, ʒss
Glycerine, q.s. ad., ℥viij
M. Sig. ʒj to ʒiss every 3 to 6 hours.

℞ Strychnine arsenate, T.T.s, gr. $\frac{1}{32}$, No. q s.
Sig. One every 6 hours.

℞ Sodii phosphatis, ℥viij
Sig. ʒj to ʒij before breakfast, to be taken in ℥viij of hot water and repeated every 3 to 24 hours, according to bowels, which best be kept quite loose.

Now, these ℞s handled with judgment and perseverence will render better results than surgery in most cases.

Again, consider the patient who is operated upon for gall stones. Some four years ago an old lady had a few weeks of bilious colic, gradually growing less severe as she took ʒj or ʒij of sodium phosphate in about ℥viij of hot water.

When giving sodium phosphate we should direct the patient how to mix it with water, otherwise he may sicken at the dose. Tell him to take a half pint cup, place the ʒij of sodium phosphate in the bottom, then turn boiling water to the quantity of about ℥iij upon this, thoroughly dissolving it and then adding cold water so that the mixture to the quantity of ℥vij or ℥viij may be drank as hot as possible.

For the last four years the old lady with gall stones has had no more of her trouble and for more than three years she has taken no more of the medicine.

Now, this is not the only case of bilious colic, gall stones, hepatic torpor, etc., that sodium phosphate in my experience has overcome. Frequently a patient leaves my office with five pounds of sodium phosphate under his arm and a lecture in his mind as to the dependence he can place upon this treatment if he sticks to it. Now, the reader must not think I tell my patients what I am giving them. I flavor, color and in various ways disguise drugs that a patient may possibly recognize. If there is a fool upon this earth it is the doctor that tells a patient what he is giving him. The therapeutic nihilist and the doctor

who tells it all come in for about equal shares of my contempt. A doctor who lacks faith in drugs never can get a patient to lend him earnest cooperation in the business of effecting a cure. True enough, "faith without works is dead," and drugs without faith backed by knowledge are about equally inert.

Reading over our large works on practice we observe that much space is devoted to prophylaxis. This is usually dull reading. Who wants to live and be compelled to diet all their days? What a patient wants is to be toned up so he will not have to nurse his ill health all his days by extraordinary precautions. However, the therapeutic doubters that write books must show their smartness in some manner, thus they introduce a surgeon and a health officer and possibly a manufacturer of baby foods, and with little real knowledge and less faith in drugs they preach to the young graduates the "wisdom" of treating "typhoid fever without drugs". If the young graduate listens to these wiseacres too attentively he must learn to make a case for surgery wherever a patient and a pocketbook are within reach, get a salaried position or a rich wife.

C. E. Boynton, B. S., M. D.
Smithfield, Utah.

ADDICTION APHORISMS.

Never in the history of man has drug addiction become so general. The increased demand on the higher basis, deranging the action of the sympathetic and abdominal brain, renders our body more prone to and decreases our capabilities of throwing off disease. People have learned to stimulate their drooping nerves, and these now require continued artificial assistance.

Drug addiction, per se, is a disease of the sympathetic nerves. But the entire economy suffers, for the finer branches of the sympathetic system pass along the arteries, veins and lymphatics to all parts. These strands of nerves control the calibre of the blood vessels, producing capillary dilation or contraction, and incur the general aspect of addiction.

The chronic use of narcotics:

(1.) Checks secretions and thus poisons the system gradually by its own debris.

(1.) Checks motion, and hence muscular action is checked and secretion is deficient.

(3.) Benumbs sensation, and hence the nerve ganglia are not alert or awake to any stimulus; thus motion and secretion are again checked, because its nerve ganglia are not stimulated to make its muscles move or its glands secrete.

When the devil has argued a man into a habit, he has one hand on him and constantly bides his time to clutch him with the other.

Habit brings age; it hardens the bones till they are as brittle as glass; it withers and wrinkles the skin to old parchment; it blears the eyes and pushes them far back into the head; it turns the hair to dried patches, with the sere crispness of withered grass; it bends the spine to the shape of the bow, and turns the voice to a metallic rattle. The new is out of sight, and dull monotony travels the beaten path to the cold chambers of the tomb.

The opium eater is not himself; he is what the drug made him. There is a physical, psychical and moral change, a sort of Jekyl and Hyde condition, an obscure palsy of certain brain centers, which breaks up consciousness of right and wrong and suspends reasoning on the nature and consequence of acts. It is a state of local poisoning, which centers in some one or more physical functions.

Drug addiction is the result of hereditary or acquired neurosis. It

is a question of psychical as well as physical diathesis.

There is a vague idea that the habit can be "antidoted". Every new drug, especially of an analgesic nature, has had its day, hailed as a cure-all, but now forgotten. Patients are stupefied for days, and even weeks, with chloral, bromides, hyoscine, heroin, cocaine and a number of other poisonous drugs and then sent home as "cured", to shortly relapse!

Hypodermic or "institute" treatment returns the patient to his home a wrecked being; he complains of "being a mere machine" and is robbed of manhood.

It is much better for the patient to remain at home, while undergoing treatment, and to continue the regular routine of his life, amidst his usual surroundings, just as if there is nothing so very difficult of attainment; nor is there, when the patient is properly treated.

The treatment employed should not overcome or subjugate the patient, but, to be satisfactory, should enable the patient to overcome and subjugate the habit, leaving him free and full possession of manhood, a man throughout and fully able to take care of himself.

After years of addiction to poisonous and powerful drugs, you cannot expect to overcome the shackles of enslavement in a few days; you will never succeed under forced treatment. Avoid "quick cures", "sleep cures", confinement and other barbarous methods. If the public knew of the suffering undergone by the addicted within the walls of such institutes, there would be a general uprising against this unwarranted torture and incompetency.

The following clipping from a patient's letter will give the reader an idea of the "hyoscine horror", a method now so prevalent at sanataria, etc.: "They drugged me into unconsciousness and after a few days I was pronounced cured, but I was nothing but a shadow. I could not stand, and the awakening was simply terrible. After living on a drug for years, to have it removed in six days, every stimulant taken away, leaving me with nothing to build up on, how could they expect a favorable result? I stood it from Tuesday until Saturday, when I tried to kill myself. They called in a neighboring physician, who found me in a most pitiable condition. People that knew me and came to see me did not recognize me; I had changed too much in those few days with suffering. Do you wonder I am downhearted, discouraged and without hope?"

Recently an article appeared in the Philadelphia Medical World, warning against the hyoscine method, giving some thirty cases, every one more or less injured and not one permanently cured of drug addiction.

Forced abstinence means temporary abstinence, plus a wrecked system. Extreme nervous prostration occurs when morphine is suddenly withdrawn, a state of utmost depression. Why depress an already depressed system? It is unscientific, cruel and the crudest kind of a "treatment", for addiction can be painlessly cured by paying proper attention to the nerve system, especially to the solar plexus.

NERVE BUILDING IS THE KEY TO SUCCESS.

Every intelligent habitue knows that he cannot be permanently cured in a few days. It requires time to overcome the ravages of years and to rebuild the system on normal tissue, normally begotten. Do not believe all you read in books on drug addiction, all more or less learned and some of them quite bulky, but disappointing in the matter of treatment. They offer a treatment, but not a cure.

A method, to be perfect, must cure all forms of addiction, whether to heroin, hyoscine, codeine, cocaine, sulfonal, the tar derivatives, alcohol or to opium and its alkaloids.

There is an occult something to addiction which renders it a most interesting study. Forces of life, long rendered latent, come back in almost youthful vigor with the establishment of a cure.

The overworked medical student falls prey to the fascinating hypodermic syringe the same as the tired practitioner. Ignorance of addiction at medical centers is to blame for many a wreckage among the followers of Aesculapius.

It is criminal to leave a hypodermic syringe with a patient. Thousands of lives are wrecked yearly through such want of judgment.

To be addicted is no disgrace; it is a disgrace to stay addicted.

The manner of addiction is as much a habit as addiction itself.

The whole body suffers contamination. How can health manifest in a body thus stupefied into inertness? To be unable to work in this hustling world is a calamity. Befogged and beclouded by poisonous drugs (cut off, so to say, from the world) how can one's duty be fully done?

The popular idea that the addicted take drugs simply for stimulating purposes is erroneous. There is no longer an attempt at exhilaration. It is a simple "must".

To talk of "drug fiends" is fiendish. It discourages the addicted, robs them of self-esteem and renders their lives void. Give them your sympathy, for they are no criminals; they need tender, careful attention, psychically as well as physically. Force will never do, it adds to their misery. It is here that kindness does wanders.

The addicted is maligned in proportion to the ignorance and inefficiency of his physician. It is an easy way to detract attention from one's own inefficiency. In my thirty years dealing with the addicted, I have found them grateful, indeed, over-grateful. A physician who maligns his patients has no treatment, or at least he has no cure.

No physician succeeds who regards his patient as a soulless piece of mechanism. The traits and character of the patient should be a subject of study. He succeeds best who goes down to his patient's inner nature, and thus engenders the sympathy which begets confidence, without which, physicians are bereft of efficiency.

J. C. Hoffman, M. D.
46 Van Buren St., Chicago.

Dr. Hoffman presents his convictions after a very large experience. There are different points of viewing this subject. The treatment at some of the institutes is very bad, but we know of other institutes where the treatment is good and the results satisfactory. Some very good practitioners have had very good results with hyoscine. Merck's Archives publishes the following abstract of Dr. G. E. Fettey's article in the Therapeutic Gazette:

"Dr. Fettey makes a temperate and effective plea for the use of hyoscine in the treatment of morphinism. He says it is true that it is a powerful agent and capable of doing great harm, but in hands of one who knows its office as well as its limitations, it is an invaluable remedy and one that fills a place in the treatment of morphinism that no other drug in the materia medica fills equally well. He denies the exaggerated claims that hyoscine is a substitute for morphine, an antidote for morphine, or a specific cure for morphinism; but says that hyoscine controls the suffering incident to the withdrawal of morphine after the patient is properly prepared for

the withdrawal, and when used in the quantity and for the length of time it is required for that purpose it may be used with absolute safety. Although is is a narcotic, it differs so greatly from morphine in its effects that its use for the length of time it is required in these cases does not in any way perpetuate the desire or necessity for the use of morphine. In fact, it overcomes both of these and keeps the patient comfortable while it is doing so. The author does not see what more could be expected of any remedy.''

ANAL PROLAPSE.

A few nights ago I was called to J. H. aged 45 years. For 24 hours he had been suffering with a prolapsed anus. The part by the irritation it had received was greatly swelled and about as large as a hen's egg. Also it was acutely sensitive. The man did not wish to take chloroform and for this I will say I admired his grit. Since chloroform has become so popular during the last decade it is rare to meet with a human being who can endure a little pain without begging for chloroform. Year by year we can observe this gradual effect of chloroform upon the fortitude of the race. History and story have much to say of heroes, but somehow, a ''hero'' who feared to have a tooth extracted ''with pain'' to me was always an anomaly. I know a frail little woman (she is my wife), once a dentist made four pulls on one of her teeth with no practical result and was about to desist when she asked if he were tired, and if so he must begin again as soon as rested for she wanted to have that tooth out. Well he stayed with it for half an hour and finally brought the tooth. Now if women can stand pain that well, ''there is no reason'' as my wife says, ''for making cowards of the sex and possibly the next generation, by making them drunk with chloroform in child birth.''

Well, while considering the above I was sending one of the family after ice and soon had them clipping off pieces of ice the size of a marble and these I was rapidly passing into the rectum. My patient was clawing the head of the bed because it hurt, but he held his nerve. Now while that boy chips ice, I will say, that of all the mortal agony a poor devil ever underwent that man with a reversed anus had his share. The boy chipping ice seemed to stand it very well. Now perhaps this was cruel, yet the patient could have had the chloroform had he said the word. Perhaps there were better ways to replace a prolapsed anus, but that night I was very sleepy and did not wish to rack my brain recollecting any of them, but the patient was not at all sleepy, he remarked that the ice burned like a coal of fire. This was an interesting discovery. It proved to me that to the anus there is little differentiation of sensation. Meanwhile the egg sized prolapse was gradually contracting. Finally with an effort on my part, a yell from the patient and a violent shock to the nerves of the ice boy the anus went home and my patient felt relief. To keep him from such trouble in future it will be necessary to exercise restraint upon his laborious activities and for a long period of time give him 1 or 2 drachms of phosphate of soda every morning before breakfast, and before the two other meals give him about one-tenth grain each of aloin and podophillin in the form of a tablet. Also $\frac{1}{40}$ grain of strychnine arsenate two or three times per day.

Had the ice treatment been used early in this case results would have doubtless been more prompt and painless. I have several times encountered anal prolapse in young children and a few cases gave me no little trou-

ble in getting the prolapse reduced. Several times I have affected this by sitting the child for some time in a tub of warm water and then resorting to taxis. In every case the reduction is comparatively easy under an anesthetic. I am confident that few who read this will be at all in sympathy with my condemnatory remarks as to chloroform. In major operations, I of course have nothing to say against its use but in obstetrics, the amputation of a finger, the drawing of teeth, the opening of an abscess and in the reduction of a dislocation.

I never encourage the use of an anesthetic. My reason for taking this stand is that to me it is repugnant to urge any human creature to be more of a coward than he or she is already. Although I have no doubt that the discovery of anesthetics has been a boon to humanity still for that boon I believe that the Spartan qualities of the race are paying a heavy tribute.

In the man or women nearest my ideal, courage and fortitude stand out more eminent than intellectual worth, because the intellectual craven seems to me to be a caricature and mockery on manhood.

C. E. Boynton, B. S., M. D.
Smithfield, Utah.

Note:—After five days the patient called and paid his bill, expressing great satisfaction as to the way he felt, and the treatment. B.

COMMENTS.

I was very much pleased and interested with the July number of your journal you sent me and concluded to subscribe and thus become a member of your family. I was especially pleased with the article by Dr. Manley and the illustrations were very good and instructive. It happened to be on a subject that I have spent some 20 years of practice in, including moles, nevi, cancers, etc.

I think the illustrations are a great help to your journal as in my opinion one good illustration is worth a page of reading matter anytime. I look forward to enjoying the future articles by Dr. Manley and also The Practical Surgery, by Dr. Miller, which I hope will be illustrated.

Kindest regards and success,

L. W. Allen, M. D.
San Antonio, Texas.

Dr. Manley will contribute a valuable series of articles next year. His large experience in the New York hospitals gives his articles the weight of authority. Illustrations will be liberally used in the Recorder next year.

The September issue of the Recorder is just at hand. I have gone through each article with pleasure, profit and enjoyment; also glancing at the numerous ads. You certainly give us BIG returns for our one dollar. I want to express my thanks to you for the able way valuable articles, facts, helps and thought are constantly presented in the Wisconsin Medical Recorder. The article by Dr. J. M. B., "A Medical Trust?" is a clincher for every thinker. Surely there is a ray of hope for those who are not in the "trust".

This is just an expression of my appreciation of the Wisconsin Medical Recorder.

Success to your efforts to help us.

W. W. Rumsey, M. D.
Napa, Calif.

One or two drops of a solution of atropine, four grains to the ounce, will give relief in earache.—J. A. Burnett, M. D., Brawley, Ark.

The Wisconsin Medical Recorder.

A Monthly Journal of Medicine and Surgery, devoted to the best interests of the whole profession.

J. P. THORNE, M. D., Editor and Publisher, Janesville, Wis.

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Letters, Case Reports and **Questions** are desired for our Discussion Department.

Society news and reports and items of interest are gladly received.

Vol. 6. NOVEMBER, 1903. No. 11.

A PASSING FAD.

The failure of Dowie's crusade to New York presages the downfall of another of the fads of the day, John Alexander Dowie must be acknowledged as a remarkably powerful man in one respect—his ability to get money out of weak-minded people. However his finances at Zion City are not as flourishing as in the past and John Alex will be obliged to do some hustling or he will be in decided trouble before long.

One thing to be noticed in Dowie's New York campaign is that he was not molested by the authorities. He was allowed to do all the healing he could without being arrested for practicing medicine. Had he been similarly used in Chicago his cult would never have developed to its present strength. The best advertising Dowie ever had were the arrests and fines imposed on him in Chicago. He immediately began the cry of martyr and many people sympathized with him. Other people thought he must be a successful healer and was hurting the doctors' business or they would not want him arrested so much. Dowie's case is another one where he will hang himself if given plenty of rope. New York City gave him the rope. No crowds flocked to him in New York for either spiritual or physical healing and none brought their money which Dowie was after.

As a healer Dowie has been no more successful than many other healers whose cures depend upon the application of suggestion. From the earliest days there have always been healers applying this principle. Every doctor should be familiar with the principles of suggestion. Every day he will notice its workings and see many things clearer. The best work we know of on this subject is Dr. H. A. Parkyn's "Suggestive Therapeutics and Hypnotism." A little study of this work will make clear the working of some of the popular fads of the day.

The sooner Dowie gets together his shekels and departs for some other land the better it will be for this country. Many weak-minded people have been fooled out of their money by this charlatan working under the garb of religion. It is always easier to work such schemes if done under a cloak of religion.

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Rundschau.

By H. Speier, M. D., Rochester, Minn.

LIFE INSURANCE AND PATENT MEDICINES.

The very compact examination blank of a modern fraternal insurance organization contains the questions Have you within the past three year used any patent or proprietary medicine? Only one explanation is possible, namely, that insurance companies begin to realize that indiscriminate self-drugging constitutes a danger of sufficient magnitude to demand attention, perhaps higher rates or even rejection. If the two powerful financial interests, life insurance companies and proprietary medicine manufacturers, fall foul of one another, we may look for a pretty fight. The poor doctor may be a gainer by it. People ought to understand that many of the most popular medicines are in reality strong alcoholics. Perhaps that accounts for their popularity. It is stated that Hood's sarsaparilla contains 18 per cent., Brown's iron bitters 19 per cent., Paine's celery compound 21 per cent , Ayer's sarsaparilla 24 per cent., Hostetter's stomach bitters 44 per cent. of alcohol. Beer contains from 2 to 5 per cent. of alcohol. These bitters are stronger than claret, champagne, port, or sherry. It is evident that a person, who takes such patent medicine regularly, should be classed among habitual drinkers, a class which is not desirable from the life insurance standpoint, nor from any other, for that matter.

CIGARETTES.

Some years ago the writer was unwise enough—he is too frequently unwise even now, when he has reached what should be the years of discretion—to express before a mixed audience doubts, whether the cigarette deserved all the opprobrium which is commonly heaped upon it. It took him a long while to live down the suspicion which this utterance brought upon him. He found a certain satisfaction, therefore, in reading in the Medical Examiner a short editorial in defense of the cigarette.

There can be no doubt that the use of tobacco, a habit acquired at the cost of more or less physical misery, is deleterious. Its influence in retarding and dwarfing physical and mental growth and activity has repeatedly been shown by comparative statistics in different schools and colleges. Boys should be taught this and warned against the habit. But it is not clear, why tobacco in one form should be more dangerous than in another, provided it is not adulterated. Some undefined, especially noxious properties are usually ascribed to the paper covering of the cigarette. What can they possibly be? The paper is always of fine texture, made of vegetable fibre, essentially the same thing, as the wrapper of a cigar, be it the leaf of tobacco or any other plant. There is no valid reason, why the smoking of cigarettes should be considered a sign of moral obliquity.

If the claim is true that the cheap cigarettes of the stores are "doped" with narcotics, then the popular crusade against them is justifiable. Physicians will do better to observe neutrality. No good can be accomplished by fighting against a popular fad, particularly, when no harm is done by it, and discretion is always the better part of wisdom. The writer, who does not use tobacco himself and

condemns it as harmful, brought this topic out as a theoretical observation.

MEDICINE AS A BUSINESS.

A report from London tells of the remarkable iucrease of suicide among British physicians. The reason given is that a physician who, a few years ago, had a professional income of $2000, can today count on only one half that amount. There are two chief causes for this depreciation in income, first the improved health of the country at large and the diminishing death rate; second, the increase of medical graduates from the universities, in excess of the demand.

A French medical journal says, that according to the official census there has been in France in one year an increase of nearly 11 per cent. of medical practitioners, and fears that at that rate the schools will soon run short of diplomas. In Germany, we are told, they are talking of systematic warfare against quacks, there being not less than 100,000 illegal practitioners in the country, while regular physicians are too often content to work for fees which in this country a self-respecting bootblack would scorn.

In the United States, the American Medical Association was told by Dr. Frank Billings, its president, that there has been an increase of twenty-five per cent. in medical graduates and of one hundred per cent. in matriculates. A remarkable showing in the most civilized parts of the world!

At the same time the medical profession is constantly undermining its own existence, teaching a better understanding of the laws of health and life, forcing people to adopt sanitary improvements, creating the new science of preventive medicine. On the one side we cut down the collective income of the profession, on the other we admit in ever increasing proportions participants to the meagre feast.

No wonder, the French editor complains, that medicine no longer nourishes its man, that the average income of doctors in our country is scarcely $1000, about that of a good carpenter. It sounds like mockery, then, to hear in addresses to medical societies and preferably to graduating classes the wail over the invasion of the profession by commercialism and the admonition to the young man, to uphold the lofty spirit of altruism and banish the unholy commercial spirit.

But the commercial spirit is abroad and rules every department of life, ordinary business, law, justice, education, art, literature, even the pulpit. Why should it be kept out of medicine? In every field of human activity it is considered proper, to bend every effort towards the attainment of the highest reward in position, wealth and power. The present age measures success by such standard, it counts as its captains of industry the men who achieve it. This may be gross materialism, there are higher aims and loftier ideals, but who has the right to say, that all mankind is going wrong and following false gods and that a view of life which has gradually developed by logical evolution, not in isolated communities, but in the whole civilized world, is a departure from truth? Whosoever put himself in opposition to the spirit of the age, has been crushed by it. Individuals, groups of men, whole nations are wiped out relentlessly in the onward rush of human movement, if standing in the way. Physicians cannot stop it.

Medicine, at the present day, is a business, it is a business struggling against heavy odds, all the refinements of modern business methods must be called to aid, in order to make a success in it. If old ideas do not harmonize with the new demand, old ideas will have to go by the board, if the commercial spirit is necessary, let it come in freely, make the best of it, and acknowledge it as a necessity.

THE DOCTORS' WORLD.

Therapeutic Briefs, Medical News Items, and Clinical Notes on Medicine and Surgery.

Fourth of July Tetanus.—Every Fourth of July brings an increased number of cases of tetanus from toy pistols and other dangerous toys, and bad accidents from cannon crackers and other dynamite articles. For several years there has been considerable discussion of this, and then the matter has been dropped until the next Fourth, when it was too late to do anything. In some cities some action was taken this year to prevent the sale of these articles, but the merchants made the plea that they had already bought their stocks of Fourth of July things and such action would cause much financial loss. For this reason no action was taken in many places. The proper time to agitate this question is now and not near the Fourth. Proper laws or city ordinances should be passed now and be published. Merchants would then have no excuse in buying such goods. Then the sale of these dangerous articles should be prevented by rigidly enforcing such regulations.

Our Fourth of July celebrations of late have been entirely too destructive to be patriotic. The old foshioned firecrackers will do just as well as the dangerous dynamite ones of today.

At the twenty-ninth annual session of the Mississippi Valley Medical Association held at Memphis October 7-9 the following resolutions were adopted:

In view of the fact that more than 400 deaths from tetanus occurred following the Fourth of July celebration of 1903, as shown by the statistical report elaborated by Dr. S. C. Stanton, of Chicago, and published in the Journal of the American Medical Association of August 20, 1903, the great majority of which might have been prevented had proper precautions been taken; therefore, be it

Resolved, That the conclusions which follow, as offered by Dr. Stanton in a paper presented before the association, at the above meeting, be endorsed as the sense of the association; and further, be it

Resolved, That the secretary be instructed to forward a copy of these resolutions and conclusions to the medical press, associated press and the secretaries of the several state medical societies, with the request that they publish same and take suitable action thereon.

1.—Enforcement of existing laws regarding the sale of toy pistols and other dangerous toys.

2.—Enactment of laws by the nation, states and municipalities prohibiting the manufacture and sale of toy pistols, blank cartridges, dynamite canes and caps, cannon crackers.

3.—Open treatment of all wounds, however insignificant, in which from the nature or environment there is any risk of tetanus.

4.—Immediate use of tetanus antitoxine in all cases of Fourth of July wounds, or wounds received in barnyards, gardens or other places where tetanus infection is likely to occur.

5.—As a forlorn hope, the injection of tetanus antitoxine after tetanus symptoms have appeared.

* * *

The New Silver Antiseptics.—For years silver nitrate has been a standard remedy in treating inflammations of mucous membranes, and its

powerful germicidal action has given it an established place in therapeutics. Its irritating and caustic action is the great objection to it and has limited its field of usefulness. The fact that it is precipitated by albumin and sodium chloride limits its penetrating power. During the last few years a number of new silver salts have been put before the profession. Most of these are not affected by albumin or sodium chloride and so have greater penetrating power with greater destruction to pathogenic mico-organisms. We have used a number of these new silver salts with satisfaction. Our most extensive experience has been with protargol, which has given especially good results. In ophthalmic practice we have used solutions of 10 to 20 per cent. In various purulent conditions of the eyes protargol is efficient, and in ophthalmia neonatorum we have had specially fine results. Coblentz has recently given in the Therapeutic Gazette an excelient article on these preparations. We present the following from it on the new silver antiseptics:

Argentamin.—This is a clear fluid containing 10 parts of silver nitrate in 10 parrs of ethylen diamin, which latter increases the power of penetration, is precipitated by chlorids but does not coagulate albumin, is strongly alkaline but less irritating than the nitrate, and for this reason is best adapted for chronic inflammations. It hs been recommended as a general substitute for nitrate of silver in gonorrheal urethritis in solutions of 1-3000 to 1-1000, and in affections of the eye up to 5 per cent. It has also been used internally.

Tachiol.—This substance, chemically silver fluorid, has been lauded as a most extraordinary germicide, being of slight toxicity and destructive, according to some statements, to pathogenic bacteria in solutions 1-200,000. Clinical data on it are very meager.

Silberol.—This sulphocarbolate of silver is said to be less caustic than the nitrate and to possess powerful antiseptic properties, and has been used in gonorrhea and ophthalmic practice.

Ichthargan is a combination of silver nitrate with ichthyol sulphonic acid, containing 30 per cent. of silver and is soluble in water and glycerine. It is said to have astringent as well as antiseptic properties and has been chiefly used in gonorrhea in solutions of 1-3000 to 1-2000 on the average, but occasionally 1-500 has been employed.

Itrol and Actol.—These substances, respectively the citrate and lactate of silver, were originated by Crede and have been tested mainly in surgical practice and in solutions of 1-2000 to 1-5000 are employed for disinfection of the skin, irrigation of wounds and the treatment of ulcers, abscesses, fistulae and the like, and also for the preparation of catgut and dressing material. The citrate (itrol) is much more soluble than the lactate (actol) and, hence, much less irritating. The citrate is also used as a dusting powder on wound surface.

Argonin.—This is a compound made up of silver casein and an alkali, insoluble in cold water but readily dissolved in hot water, and is precipitated by acids. It contains about 4 per cent. of silver, although a new combination known as Argonin-L has been brought out which contains 10 per cent., is more stable in solution and also more soluble in cold water. Argonin is ordinarily employed in the strength of 2 to 10 per cent., especially in cases of gonorrhea and affections of the eye, and in these solutions is unirritating, as a rule.

Albargin.—A combination of gelatose, a derivative of gelatin, with silver nitrate, freely soluble in water and of neutral reaction in solution and can be made to yield 20 per cent. of free silver nitrate. A solution of 0.5 per

cent. causes the precipitation of albumin, but in the percentages recommended—0.1 to 0.2 per cent., in the treatment of gonorrhea, this is not an objection to its use.

Largin.—This is a combination of a paranucleo-proteid with silver, containing in an air-dried condition 11.1 per cent. of the latter. It is soluble in 9 parts of water, is not precipitated by albumin or sodium chloride, and is relatively free from irritating properties, and from its high penetrating power largin has been employed in the treatment of gonorrhea in solutions of ¼ to 5 per cent., according to the stage of the disease, and in ophthalmic practice, although in the latter better results have been obtained in cases of non-gonorrheal character.

Nargol.—This preparation is formed by the union of nucleinic acid and silver and contains 10 per cent. of the latter. It dissolves readily in warm water, giving a faintly alkaline reaction, it is not coagulated and is not precipitated by sodium chloride or alkalies, and is comparatively unirritating. It has been employed in the treatment of gonorrhea in solutions of ½ to 5 per cent. by injection and up to 10 per cent. by instillation. It is recommended in diseases of the eye in solutions up to 10 per cent.

Argentol.–Chemically this substance is silver oxychinolin sulphonate, more soluble in hot than cold water, contains about 32 per cent. of silver and has been employed as a dressing for wounds, skin diseases, venereal ulcers also in gonorrhea in 1-1000 solution.

Collargol.—Also known as argentum soluble Crede, or argentum colloidale, and is an allotropic form of silver, soluble in water and albuminous fluids. It may be introduced into the system by means of ointments, hypodermically, by intravenous injections and by internal administration. Its germicidal action is due to the fact that it forms combinations which inhibit the growth of bacteria and neutralize their toxines, while, owing to its rapid excretion, it does not produce argyrosis or any other poisonous effect. Collargol has been extensively employed in septic infections of various character—such a septicemia, puerperal fever, diphtheritic complications, scarlatina, typhoid fever, venereal diseases and some skin affections. The dose of the ointment is 30 to 40 grains. For subcutaneous injections one-half to two syringefuls of a 1-200 solution is employed, and internally it may be administered in doses of ⅓ grain in pill or solution.

Protargol.—This is a silver proteid preparation, not precipitated by albumin, sodium chloride or alkalies and contains about 8 per cent. of silver in a fixed combination, and is soluble in water up to 50 per cent. It possesses high penetrating power and is free from irritating properties in the solutions ordinarily employed. For internal administration in septic conditions, gastro-intestinal affections, locomotor ataxia, etc., it is given in 1 to 3 grains by the mouth. In the treatment of gonorrhea the solutions vary in strength from ¼ to 1 per cent. and from ½ to 5 per cent. for eye affections.

Coblentz draws the following conclusions from his study of the above combinations:

1. That the organic silver preparations represent a real addition to modern materia medica.

2. That all of them are less irritating than the nitrate of silver and, hence, much better tolerated by the patient.

3. The fact that they are not precipitated by albumin and chlorides enable them to penetrate more deeply into the tissues and, therefore, promote their germicidal activity.

4. That the percentage of silver is of less importance than the special combination in which the silver exists.

CLINICAL SOCIETY PAPERS

Amputation of Breast Demonstrating Triangular Dressing of Arm, By Dr. J. A. Bodine.

Immunity, By Dr. F. M. Jeffries.

CLINICAL SOCIETY OF THE NEW YORK POLYCLINIC MEDICAL SCHOOL AND HOSPITAL.

Regular meeting, with the president, Dr. James Hawley Burtenshaw, in the chair.

AMPUTATION OF BREAST DEMONSTRATING TRIANGULAR DRESSING OF ARM.

Dr. J. A. Bodine presented three cases of amputation of the breast for carcinoma, in which the arm had been dressed during the healing period on a triangle holding the upper arm at right angles to the body. He called attention to the consequent freedom with which the patients could use their arms. He had been using this dressing in all such cases for the past three years. An isosceles triangle, made of light splint-wood held in position by adhesive strips, is so placed against the side of the chest that the upper arm is at right angles to the body, while the forearm in supination rests along one side of the triangle with the hand resting upon the hip. The triangle presses along the body between the line of incision for the removal of the breast and the posterior puncture made for the drainage-tube. The arm being in this position the patient is perfectly comfortable while in bed and also while walking about. Adherence of the skin flap and scar to the under surface of the arm after enucleation of the axillary contents is an inch and a half to two inches nearer the shoulder end of the arm when dressed in this position than it is when bound against the chest. It is this difference in position of attachment of the scar and skin flap to the arm that gives such freedom from cicatricial contraction following amputation of the breast.

Dr. R. H. M. Dawbarn said that he had employed the method demonstrated by Dr. Bodine several times. It is more comfortable because the abduction of the arm slides the scar so that it does not adhere to the region of the vein nor the main lymphatics. Patients at times have been made very miserable after amputation of the breast by swelling of the arm, due to adhesion of the scar, the forearm and arm becoming large and edematous and annoying the patient for a long time. He avoids it, partly by carrying the incision up the middle or even posterior part of the anterior portion of the axilla where the main vessels lie.

There is only one muscle which can take the place of the pectoralis major and minor, both of which must be entirely removed in the modern operation, and that is the deltoid. It is wonderful how this muscle hypertrophies, and being inserted into the outer third of the collar bone, with a very poor leverage, how it accomplishes its mission. In the case of women who have very weak deltoids (the reverse of those shown by Dr. Bodine,) it has been part of his regular operation of late years to dissect free from the clavicle one inch of the anterior edge of the deltoid, and to carry it inward as far as it will easily go, and then to sew it to the stump of the pectoralis major. That muscle,

in course of time, becomes hypertrophied, and it helps a great deal; but in cases in which this operation is performed, it obviously would not do to use the isosceles triangle, with its necessary abduction of the arm. In the technique just described, as to the deltoid, the cephalic vein is liable to cause trouble, and he generally ties it off, but this may not be necessary if great care is taken. It is only when the axillary vein is involved in the cancerous growth that saving the little cephalic vein becomes a matter of importance.

IMMUNITY.

The paper of the evening was read by Dr. F. M. Jeffries. It was a fifteen minute resume of the investigations culminating in our present ideas of immunity. The paper opened with definitions of immunity and infection and then described and classified the varieties of immunity.

After classifying the means by which immunity may be acquired, the speaker proceeded to a discussion of the production of toxins and antitoxins, and the statement was made that when the problem of the production of antitoxin is solved the problem of immunity will also have been solved. The subjects of hemolysis and bacteriolysis were briefly gone over, and then the two chief theories of immunity were explained, viz., Metschnikoff's theory of phagocytosis and Ehrlich's side-chain theory. It was stated that neither of these theories explains all the phenomena of the subject, although they have each added materially to our proper understanding of the same. Other conditions than those explained in these two theories must be taken into consideration.

The paper closed as follows: "To sum up, the processes of immunity are exceedingly complex, and there is no theory yet advanced which satisfactorily meets the requirements of a thorough explanation. The end is only attained by the activities of all parts of the body, the cells as well as the fluids. Nor must we lose sight of the fact that the bacteria themselves are subject to variation, as an example of which may be cited the colon bacillus, the normal habitat of which is the intestinal tract, which probably has to do with the processes of digestion, yet let the proper conditions be supplied and it gives forth its poison, that is to say, becomes pathogenic; and finally, we know that many of perhaps all bacteria produce in their growth enzymes which are bacteriolytic in themselves." A number of articles in English dealing with the subject were cited.

Dr. Albert Kohn opened the discussion of Dr. Jeffries' paper. He said that Metschnikoff studied the white cells. The origin of his work shows how laborious it must have been, and it is wonderful how his theory of phagocytosis was gained on a theoretical basis, working on the lower organisms. He studied the exoderm, the endoderm and the mesoderm; the workings of this layer were to a certain extent of the same nature as those of the endoderm, that is, of a digestive type. He then began to prove his conclusions on marine animals, inserting foreign bodies in order to see what the action would be. He found that irritation was caused by what seemed to be attempts at digestion. Later, he modified his primary conclusions that the phagocytes were the only bodies concerned in the digestion of the bacteria and their toxins. His theory was accepted until Bouchard brought forward the theory that it is not the phagocytes that digest the live bacteria; that after their destruction they carried away their dead bodies.

As to the question of susceptibility,

according to Ehrlich, all consideration of such outside factors as hygiene, traumatism, etc., must be omitted. If we have receptors which in the one set of cells will unite with certain parts of the toxins, the haptophorus atoms, these receptors already exist, and they cannot be influenced by traumatism, hygiene, etc., unless the receptors are changed, decreased or increased by those outside factors. The fact that the alexin bodies can be destroyed by heat, a fresh supply of sear added, and the properties of the alexin bodies return proves that the heat destroys the alexin.

Dr. James J. Walsh said that the subject of immunity was usually considered very complex. In reality, however, it is not more involved or inexplicable than is the simple matter of solutions. We put sugar into water until it will not receive any more, but the same water will then take up a large amount of salt, and after it has become saturated with salt it will take up various other substances. A child suffers from scarlet fever and will not take the disease any more, but will if exposed, take mumps or measles. It is as if the cells became saturated with the toxins of one disease after another.

The first step in immunity, as regards our modern knowledge of the subject, was taken by Pasteur when he demonstrated that chickens at the normal temperature would not contract anthrax, though if their temperatures were reduced to that of the animal in man, they were liable to anthrax. The six or eight degrees of higher temperature produced a natural immunity to the disease. In the light of Ehrlich's theory of immunity depending on the number of side chains or cells, one is tempted to wonder whether more side chains exist at the higher than at the lower temperature and whether a chicken's immunity could be destroyed by a series of changes of temperature. As a matter of fact, Ehrlich's and Metschnikoff's theories are not so far apart as has often been thought. The protective substances in the blood and cells, according to Ehrlich's theory may well be supplied by the activity of the phagocytes.

The first immunizing process ever invented was Jenner's vaccination. During the past week Dr. Walsh said that he had been with Dr. Calkins of Columbia University who has been working on the protozoon supposed to cause smallpox. This protozoon occurs also in vaccinia. In the case of vaccination, however, the parasites invade only the cell bodies, while in smallpox they invade the nuclei of the cells, grow much more luxuriantly, and after a time invade the whole body, thus producing a generalized septic condition. In recent years we have come to realize as the result of studies in immuniiy that babies who are fed on mother's milk are better protected against contagious diseases then are those artificially fed. The principle reason for this is that most mothers have had the ordinary diseases of childhood and enjoy immunity from them. Immunizing substances occur in their milk and are transferred to the child during the nursing. This constitutes another reason why mothers should be encouraged to nurse their offspring and not be allowed to neglect this sacred duty unless there is some absolutely necessary reason.

Dr. L. J. Ladinski presented a patient with a large anterior labial hernia. He said that there are two varieties of labial hernia, the anterior, which is similar to the scrotal hernia in the male, and the posterior in which the hernia descends either in front of or behind the uterus into the vagina and labia. Labial hernia must be differentiated from fibromata, sarcomata, or cysts of the labia.

THE DOCTORS' LIBRARY

This Department contains each month reviews of the latest and best books. Items of book news will keep readers informed on progress in the world of medical literaure.

INTERNATIONAL CLINICS:—A Quarterly of Illustrated Clinical Lectures and especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Ophthalmology, Dermatology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and practitioners. By leading members of the medical profession throughout the world. Edited by A. O. J. Kelly, A. M., M. D., Philadelphia, with the collaboration of William Osler, M. D., Baltimore; John H. Musser, M. D., Philadelphia; James Stewart, M. D., Montreal; J. B. Murphy, M. D., Chicago; A. McPhedran, M. D., Toronto; Thomas M. Rotch, M. D., Boston; John G. Clark, M. D., Philadelphia; James J. Walsh, M. D., New York; J. W. Ballantyne, M. D., Edinburgh; John Harold, M. D., London; Edmund Landolt, M. D., Paris; Richard Kretz, M. D., Vienna. With regular correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels and Carlsbad. Volume III, Thirteenth Series. Pages 305. Illustrated. Price, Cloth, $2.00. J. B. Lippincott Company, Philadelphia.

A leading and most valuable feature of this volume is a symposium on "Diseases of the Gall-Bladder and Gall-Ducts," occupying 121 pages of the book and comprising the following articles: "Some Medical Aspects of Diseases of the Gall-Bladder and Gall-Ducts," by J. H. Musser, M. D., "The Causation, Symptoms and Diagnosis of Gall-Stones," by R. D. Rudolph, M. D., Toronto; "The Diagnosis and Medical Treatment of Cholelithiasis and Cholecystitis" by Chas. G. Stockton. M. D., "Biliary Cirrhosis of the Liver with and without Cholelithiasis," by F. Parkes Weber, M. D.; "The Value of, and Indications for Surgical Intervention in Cholelithiasis," by F. Lejars, M. D.; "The Surgical and Post-Operative Treatment of Chronic Gall-Stone Disease," by John B. Deaver, M. D. These articles form a practical treatise on the subject.

We call especial attention to a few leading features of the volume. Prof. David W. Finlay, of the University of Aberdeen, furnishes an article on "The Treatment of Pneumonia". He avoids the use of antipyretic drugs and all depressing lines of treatment and especially uses a supporting and stimulating line of treatment. Dr. Albert Robin, of the Paris Hospitals, writes "The Medical Treatment of Cancer," and offers some suggestions and some excellent formulas. An exhaustive and valuable article is "Malarial Infections: Their Parasitology, Symptomatology, Diagnosis, and Treatment," by Chas. F. Craig, M. D., of the U. S. Army Hospital Service. A seasonable article is "Clinical Types of Pneumonia," by Dr. R. Murray Leslie, of the Royal Hospital for Diseases of the Chest, London. Dr. J. A. Bodine contributes "Cocain Anesthesia," and Dr. John A. Lewis, "General Anesthesia". A notable article is "The Modern Treatment of Varicose Veins," by C. E. Schwartz, M. D., of Paris. The book is illustrated with many plates, colored and half-tone, and cuts. It merits its name of the post-graduate course at home.

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A COMPEND OF HUMAN ANATOMY.—By Samuel O. L. Potter, M A., M. D., M. R. C. P. Lond.,

Formerly Professor of Principles and Practice of Medicine in the Cooper Medical College, of San Francisco; Author of the "Handbook of Materia Medica, Pharmacy and Therapeutics, etc.". Seventh Edition, Revised and Enlarged, with 138 Engravings, Numerous Tables and 16 Plates of the Arteries and Nerves. Pages 372. Price, Cloth, 80 cents net. P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia.

This volume is one of the series of Quiz-Compends so popular with medical students. This edition has been entirely rewritten and brought into harmony with the latest text-books on the subject. As it is especially intended for the use of students in preparing for the quiz and examination, the text is confined to essentials and superfluities of description avoided. This edition is much larger and more complete than previous editions, thus largely avoiding the criticism of previous editions that the subject was considered too superficially. It is a most excellent condensed treatise on anatomy and the student or practitioner who thoroughly knows all the anatomy between its covers will not be found lacking in knowledge of this fundamental science of our profession.

STORIES OF A COUNTRY DOCTOR.—By Willis P. King, M. D., of Kansas City, Mo. Illustrated. Pages 368. Price, Cloth, $1.00. The Clinic Publishing Co., Ravenswood Station, Chicago.

This is a book which has passed through many editions. The wit and pathos of the stories have made the book very popular. Its anecdotes and personal experiences are true to life and very entertaining. The book begins with stories and reminiscences of the pioneer days and narrates interesting incidents up to the present. The style of the book is fascinating and refreshing, and it is the sort of a book a doctor needs for mental recreation. But the book also abounds in good suggestions and helpful hints. The publishers are making a special offer to send this book and "Recollections of a Rebel Surgeon", another good book, both for one dollar.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS.—Under the General Editorial Charge of Gustavus P. Head, M. D. Vol. IX, Physiology, Pathology, Bacteriology, Anatomy, Dictionary. Pages 233. Cloth, $1.25. The Year Book Publishers, 40 Dearborn St., Chicago.

The section on pathology and anatomy is edited by W. A. Evans, M. S., M. D.; that on physiology, bacteriology and hygiene by Adolph Gehrmann, M. D. The dictionary of new words is edited by Wm. Healy, A. B., M. D. This is a good issue.

BOOK NOTES.

W. B. Saunders & Co., 927 Walnut St., Philadelphia, have just issued a beautiful catalogue of very recent medical books. It contains much desirable information on new books and many specimens of their illustrations. A postal will get this catalogue.

Each issue of the Household-Ledger improves. It is a periodical of interest to the whole family. The striking feature of the November number is "November Woods and Fields", by L. W. Brownell, splendidly illustrated. "Concerning Celebrities of Today," by Fannie M. Lothrop, is an interesting and instructive department of each issue. This month there are portraits and sketches of nine celebrities.

The three leading articles in the November McClure's are unusually

strong and worth many times the price of the magazine. "The Wonders of Radium," by Cleveland Moffett, is a splendid article, finely illustrated. Mr. Moffett obtained the material for the article from the discoverer himself, M. Curie, and his laboratory assistant, M. Daune. "The Trust's New Tool—The Labor Boss," by Roy Stannard Baker, shows a startling labor situation in New York. "New York," by Lincoln Steffins, is another of his series of flaming pictures of American cities. Fiction and good pictures round out the number.

E. B. Treat & Co., 241-243 West 23d street., New York, have the following interesting books in press. "The Blues, (splanchnic neurasthenia) Causes and Cure." By Albert Abrams, M. D., F. R. M. S. 8vo. Pages 230. Illustrated. Price, $1.25. This form of nervous weakness is so common as to render this volume of more than theoretic interest. "Diseases of Metabolism and Nutrition; Part IV, Autointoxication." By Prof. Dr. Carl von Noorden, physician-in-chief to the City Hospital, Frankfort-on-Main, and Dr. Mohr. Authorized American edition. Edited by Boardman Reed, M. D. Small 8vo. Pages 80. Price 50 cents.

The brisk attack on snobbery that was a leading feature of the October Everybody's has been followed up in the November issue by a significant article on "Successful Men who are not Rich." Success without money seems anomalous to the modern American; yet on reflection, the most eager devotee of plutocracy cannot deny that such men as Senator Hoar, of Massachusetts, President Eliot of Harvard, Dr. Rainsford and General Joe Wheeler are, in the best sense of the term, successful. And the private income of the most successful man in the United States today—Theodore Roosevelt—is said to be well under $7,500 yearly. It is good to be reminded of these triumphs that are not measured in dollars. Eugene Wood contributes "The Good Bacteria," and Alfred Hodder, "Reforms that Reform". Everybody's has a vast array of timely articles, good pictures and wholesome fiction; it is especially noticeable how timely much of its contents is. Its many short articles are appreciated by busy medical men.

"A House Divided" is the taking title of the novel in Lippincott's Magazine for November. Its author's name, Ella Middleton Tybout, is a familiar one to readers of Lippincott's Magazine, though heretofore her productions have been in the line of short stories. Her "Parables in Black" lately running through Lippincott's are particularly striking and indicate that which is richly fulfilled in the latest work. The little state of Delaware has been chosen by Miss Tybout for the placing of "A House Divided," and her portrayal of a farmer who, because he believes his wife to be untrue to him, has not spoken to her for sixteen years, is a remarkably clever bit of characterization. Lippincott's novels are always worth while—and the November number sustains this opinion. Two papers of much interest, and each possessing the intimate personal note, are contributed to the November number: "A Royal Interview with Italy's Queen," by Maud Howe, is a very pleasant description of a private interview with the queen and a charming talk about Americans prominent in both worlds. In the third chapter of "Avowals" George Moore tears out Tolstoy and his work in very radical fashion. The number also contains many good, short stories and a liberal amount of excellent verse. For stories that are good Lippincott's excels.

MODERN THERAPEUTICS

Brief original communications and short abstracts giving the latest in therapeutics.

A THERAPEUTIC WONDER OF THE TWENTIETH CENTURY.

By J. Zachary Taylor, M. D., 545 N. Carey St., Baltimore, M. D.

"Hello, Doc! I have come to see you through persuasion of a friend of mine who likewise is a friend of yours. Listen! I have quit all doctors; curse the day I ever saw one. My wife died a little over a year ago, at which time I was in perfect health. I went to pieces. Consulted with and took treatment from my family physician, a homoeopath, for six months, and grew worse. Quit him and was treated by allopaths. Grew worse, until in despair, I gave up hope of ever getting any better. I took strychnine until I thought my head and arms would jerk off, phosphates until my brain was on fire, and every d——n thing known to science; and now just look at me! You see this bottle? (half pint flask). This is whisky and valerian. I can't do without it. I can't walk unless full of it, and I know it is killing me, but what am I to do? I would use my gun, but the thought of leaving a stigma on my name to disgrace my children, makes me a coward, or I would soon end the whole trouble. And now I am before you to hear what you have to say."

Such in brief is his story, but the half was not told. This patient is an educated, intelligent gentleman of means, and undoubtedly one of the worst cases of nervous prostration I ever saw. Only the whisky and valerian gave him sufficient strength and courage to call on me. His mind was somewhat impaired. He was losing flesh, his hands trembled, his eyes had a wild stare, his pulse rapid, pain at heart, suffered insomnia unless under influence of some drug, kidneys acting badly, liver torpid, constipation all the time, easily excited, quick to get raving angry, no control of temper, talked randomly, face carried a scowl; in fact, the man was suffering acute mania and with no nerve and brain vitality to save him from the mad house or suicide. I was at my wits' end. I knew that he had been treated by skilled physicians, and could scarcely see a gleam of hope for me to do anything. He could tell me the names of all the drugs and other treatment he had had, both at home and at sanitariums, and not once did he mention the remedy I had in view, should I undertake the treatment of the case. This gave me a ray of hope. I wish to state that prior to his affliction he neither drank, smoked, chewed tobacco nor kept late hours. He was strictly a business man, and at night remained at home with his wife and lovely children. He was a grand, good husband and a doting father, affable and gentle to all mankind. But what a transformation now! After talking at some length, I said to him that I knew of one remedy which I felt sure would keep him. I got his confidence and he consented to take my treatment. The battle was a severe one for both him and myself, but after a week's treatment he felt greatly benefited, and this so encouraged him that he told me he would stick with me six months and longer, provided he could discover any further benefit. I gave him the proper teatment for constipation, kept the heart in working shape, the kidneys flushed out, the

liver active, but gave no anodynes, except occasionally somnos combined with nux vomica and tincture capsicum. He is well now, having gained twenty pounds in weight, and his brain is as active and clear as before he was taken sick. I know you are anxious to know what did it. It was bioplasm (Bower). I regard this therapeutic discovery as a marvel of the inventive genius, and one destined to break all records in treating diseases of a neurotic nature. It quickly cures optic atrophy, amblyopia and other eye troubles that heretofore proved almost intractable. It is indicated in all retarded metabolism and will surprise you in what can be accomplished in treating certain forms of paralysis, locomotor ataxia, etc.. This article is for the good of the profession. I wish to state that I have never met nor have I seen any of the people that manufacture bioplasm, but know it is both a powerful and ethical remedy, which should be known to physicians the world over.

CHEMICAL LYMPH.

By F. C. Gay, M. D., 114 Macon St., Brooklyn, N. Y.

A few of the professional brethren have criticised that name. They claim that a chemical lymph is an impossibility; that lymph is always an animal product. I would ask them to refer to their dictionaries and see if they are right. Webster's first definition of lymph is, "A spring of water; hence, water or a pure transparent fluid, like water." That describes chemical lymph perfectly and gives it a legitimate, I might say, prior right to its name.

He gives a second definition as, "A colorless fluid in animal bodies, contained in certain vessels called lymphatics."

The criticism has also been made that the formula of chemical lymph is insufficient; that proportions of ingredients in the different compounds are not definitely stated.

The formula gives the list of salts which enter into the composition of the lymph in all its compounds. The clearness of wording may have been sacrificed to brevity somewhat, but it is intended to convey the informntion that, first the proportions of these salts are the same as in the normal human blood, and any physician's knowledge of physiology will tell him what these proportions are, then in each lymph compound, designated by number, the salts which are deficient in the blood of any subject of the disease, or class of diseases, for which that compound is designed enter into its composition in exaggerated proportions to overcome the deficiencies in that disease or class of diseases.

The process of compounding is elaborate and complicated and the result is a delicate but potent liquid ready to be immediately absorbed upon injection and appropriated by the blood.

I consider that as definite as the formulas that we get with the majority of therapeutic agents now in general use, and the product itself much more cleanly and scientific than many of them.

The results from use of chemical lymph in treating chronic disease can not be criticised, and results ought to be our first consideration.

HYPODERMIC SYRINGE.

By A. V. Banes, M. D., St. Joseph, Missouri.

I have recently had the opportunity of securing an instrument that is proving of so much value and satisfaction to me in various cases of office practice, that I wish to call the atten-

tion of your readers to it, and some conditions wherein it has proven invaluable to me. I refer to the "Ideal" hypodermic syringe, made by the Ideal Chemical Co., St. Paul, Minn. The particular parts of value of this instument were called to my attention by a dentist friend, who was using one. In all my thirty-two years' experience I never saw an instrument that appealed to me like this syringe does. It is made with extra long barrel, has a self-oiling, expanding plunger, with an extended piston and a large hand-head that does not hurt nor cramp the hand when extreme pressure is needed in the treatment of those conditions requiring great force to distribute the medicaments properly. The parts are all removable so that it is rendered aseptic readily.

In the treatment of such conditions as hernia, hydrocele and hemorrhoids, I have found it of the greatest value of any instrument in my possession. In pharyngeal or abscesses of the palatine arch I would be lost now without this syringe, as you can draw off pus and syringe out the space without taking out the trocar, The syringe comes as a part of the Ideal hernia outfit, a treatment that has proven of great value and success to me, since I have had it, I have proven to myself that hernia can be permanently cured.

I do not believe any doctor can afford to be without this syringe, and I am sure you will feel just as I did when I first received mine—like a school boy with his first pair of red topped boots.

The abstraction of blood from the deep blood-vessels into the superficial capillaries through physiologic innervation is physiological phlebotomy—bleed, but save the blood—is the mechanics of antiphlogistine.

CLINICAL NOTES ON DYSEMIA.

By Louis J. Gravel., M. D.

Physician-in-Chief to the Hotel Dieu Hospital and Chief of the Laboratory, Montreal, Canada.

The word anemia is a misnomer and serves to perpetuate an erroneous idea of the conditions to which it is applied. It had its origin at the time when scientific medicine was in its infancy; before the microscope and other instruments of precision had elucidated the physiology of the blood and blood-forming organs. In those days the pallor of the skin and mucous membranes was attributed to "a diminution of the amount of blood," and even at the present day there are physicians who still share in the fallacy. From a pathological standpoint, the chief features of the so-called anemic state, are the morphological and chemical changes in the blood,—its qualitative deterioration. It, therefore, has been suggested that the term dysemia (bad blood) would more closely describe the conditions present. However, a word which has the sanction of usage for so many years cannot be easily displaced, and will probably long survive in medical nomenclature.

There is only one criterion on which to base a diagnosis of dysemia, and that is the changes in the blood. The other symptoms to which much significance was formerly attributed,—pallor of the skin and mucous membranes, rapid pulse, and palpitation, general weakness, vertigo, and the like,—are of doubtful value, since they are present in various conditions in which the state of the blood is normal. Thus, for instance, they may result from purely psychical causes,—fear or anxiety,—or occur in the course of chronic digestive disorders, or neurasthenia.

To estimate the degree of dysemia the diminution in the percentage of

hemoglobin is of the greatest importance, and this may range within wide limits, even to one-fifth of the normal proportion. Next in importance is the reduction in the number of red blood corpuscles, which, however, is perceptible only in the more marked cases. In the severe types of the disease reductions to 50 per cent. are quite frequent. There is also a change in size and shape of the red blood-cells, known collectively as poikilocytosis, in the pronounced form of dysemia. Usually the corpuscles are diminished in size and their shape becomes irregular; there may be granular deposits in their protoplasm. Sometimes there may be found in the blood the so-called normoblasts, which are nucleated red cells, resembling those present in the red bone marrow. The latter have been specially observed in dysemia, following profuse losses of blood, but in any case are of no significance.

These remarks apply only to the simple types of dysemia and not to the progressive pernicious forms, characterized by changes in the blood-forming tissues. As pointed out by Ehrlich and Lazarus in an excellent article on the subject, to which I am indebted for much information, the radical difference between the simple and pernicious varieties of dysemia is that in the former the regeneration of blood takes place in a physiological manner, while in the latter it reverts to the embryonic type, as shown by the presence of foreign elements. The majority as cases of simple dysemia are secondary to diseases attended with malassimilation, tissue waste, hemorrhages, and profuse discharges, while it is important to remember that it is often due to a condition of auto-toxemia, or to the absorption of toxins generated by bacteria. It is, therefore, not enough to make a diagnosis of dysemia, but the primary cause should be sought and removed if possible.

The treatment of the changed condition of the blood consists in the adoption of an appropriate regimen,—a nutritious dietary, fresh air, and sunshine,—in connection with the administration of iron supplemented occasionally with arsenic. Hydrotherapy is a very valuable auxiliary in some cases. The patient should rest as much as possible, in severe cases should take a vacation in the mountains. Long before modern hematology had its beginning, iron was administered on empirical grounds, and all that modern medicine has contributed to the therapy of dysemia is the introduction of ferruginous compounds, which are not only superior in efficacy to those in former use, but free from their objectionable features. The chief disadvantages of the older iron preparations were their disturbing effect upon the digestion, their tendency to produce constipation, and their destructive action upon the teeth. It is a notable achievement of pharmaceutical chemistry to place at the physician's disposal organic ferruginous compounds, which approximate closely in composition to the form in which iron is contained in the red blood-globules. The most prominent preparation of this kind is pepto-mangan (Gude). This consists of iron and manganese in the form of peptonates, which, representing albuminous elements in their last stage of digestion, are immediately absorbed and assimilated, without undergoing any previous transformation in the gastrointestinal tract. The presence of manganese in combination with iron in pepto-mangan is based upon the fact that both of these elements are found associated in the red globules.

Having had my attention directed to this preparation through the reports of leading authorities in European and and American journals, I subjected it to a thorough test in the Hotel Dieu Hospital, Montreal, and have briefly

recorded here the histories of a number of typical cases in order to demonstrate its efficiency in dysemia, as shown by the rapid increase of the hemoglobin percentage and number of red blood-cells.

Case 1.—A woman, aged 25 years; dysemia. Time of administration, 30 days. First count, 3,376,400 red corpuscles to the c.mm.: second count, 4.400,300 to the c.mm. Hemoglobin; first examination, 51 per cent.; second examination, 70 per cent.

Case 2.—A girl, aged 20 years: dysemia. Time of administration, 30 days. First count, 2,630,200 red corpuscles to the c mm.; second count, 3,970,000 to the c.mm. Hemoglobin: first examination, 40 per cent.; second examination, 60 per cent.

Case 3.—A man, aged 25 years; dysemia, following typhoid fever. Time of administration, 30 days. First count, 2,500,200 red corpuscles to the c.mm.: second count, 3,050,000 to the c.mm. Hemoglobin: first examination, 39 per cent.: second examination, 50 per cent.

Case 4.—A woman, aged 39 years; dysemia. Time of administration, 30 days. First count, 2,750,400 red corpuscles to the c.mm.: second count, 3,500,000 to the c.mm. Hemoglobin: first examination, 35 per cent.; second examination, 60 per cent.

Case 5.—A woman, aged 35 years; dysemia, following miscarriage. Time of administration, 30 days. First count, 2,800,000 red corpuscles to the c mm.; second count, 3,300,000 to the c.mm. Hemoglobin: first examination, 33 per cent.; second examination, 45 per cent.

Case 6.—A young girl, aged 17 years; dysemia, following typhoid fever. Time of administration, three weeks. First count, 2,495,270 red corpuscles to the c.mm.; second count, 3,300,200 to the c.mm. Hemoglobin (percentage of normal amount): first examination, 35 per cent.; second examination, 45 per cent.

Case 7 —A young boy, aged 16 years; dysemia, following typhoid fever. Time of administration, three weeks. First count, 3,670,000 red corpuscles to the c mm.; second count, 4,600,300 to the c.mm. Hemoglobin (percentage of normal amount): first examination, 40 per cent.; second examination, 65 per cent.

Case 8.—A man, aged 30 years: dysemia, following amputation of the leg. Time of administration, three weeks. First count, 2,360,400 red corpuscles to the c.mm.: second count, 3,500,200 to the c.mm. Hemoglobin (percentage of normal amount): first examination, 30 per cent.; second examination, 70 per cent.

Case 9.—Woman, aged 24 years: dysemia, following pneumonia. Time of administration, three weeks. First count, 2,600,250 red corpuscles to the c.mm: second count, 3,400,000 to the c.mm. Hemoglobin (percentage of normal amount): first examination, 35 per cent.; second examination 70 per cent.

Case 10.—Woman, aged 20 years: dysemia, following miscarriage. Time of administration, three weeks. First count, 2,502,600 red corpuscles to the c.mm.; second count, 4,006,200 to the c.mm. Hemoglobin (percentage of normal amount): first examination, 40 per cent ; second examination, 65 per cent.

Case 11.—Man, aged 30 years; dysemia, following typhoid fever. Time of administration, three weeks. First count, 2,300,000 red corpuscles to the c.mm.: second count, 3,640,160 to the c.mm. Hemoglobin (percentage of normal amount): first examination, 33 per cent.; second examination, 62 per cent.

Case 12.—A girl, aged 16 years; dysemia. Time of administration, four weeks. First count, 2,290,700 red corpuscles to the c.mm. Hemoglobin (percentage of normal amount): first examination, 40 per cent.; second examination, 60 per cent.

Case 13.—A girl, aged 16 years: dysemia. Time of administration, four weeks. First count, 2,430,300 red corpuscles to the c.mm ; second count, 4,000,300 to the c mm. Hemoglobin (percentage of normal amount : first examination, 40 per cent : second examination, 65 per cent.

Comparing my results with peptomangan (Gude) with those obtained from other chalybeates of this class, I have been led to give it a decided preference. As already stated, the only reliable means of diagnosticating dysemia is by the examination of the blood, and for the same reason the only way of testing the efficiency of a ferruginous preparation is by making blood-counts and estimating the percentage of hemoglobin. On the ground of my findings, as shown by the histories of the cases cited, the results of such tests have been uniformly satisfactory and entitle the preparation to a leading place in ferruginous medication.—Buffalo Medical Journal, August, 1903.

As a non-conductor of heat antiphlogistine maintains the degree of temperature at which it is applied or nearly so, for 12 to 24 hours, requires no attention whatsoever and is in every way pleasant and agreeable.

THE TREATMENT OF SYMPTOMS.

In a highly interesting article on this subject, Walter M. Fleming, A. M., M. D., of New York City, uses the following language:

Long experience in the treatment of diseases in their incipiency, evidences beyond all debate, that almost invariably, the attack in a large proportion of cases is inaugurated by febrile symptoms of greater or lesser severity. Also, it may be noticed that constipation or torpid inactivity of the bowels prevails. Therefore, the first indication in the incubation or incipiency of the attack, of almost any form or nature, is primarily to allay the fever, pain-nervousness and solicitude of the patient, and secondarily to empty the alimentary canal. These two ends being accomplished, a long advance towards a possible abortive issue of the attack has been made, or in any event, the first indication and requirements are fullfilled, in proper progress toward a cure. Thus in the primary treatment of the numerous ills which are characterized by the above quoted symptoms, the physician will find laxative antikamnia and quinine tablets at once handy, convenient and reliable, safe and sure, and to which the turbulent symptoms of fever, constipation, pain-sleepleness, nausea and generally wretched depression yield so promptly and gracefully, that it is certainly refreshing to the physician himself, to note the change in his patient, from suffering and solicitude to comfort and quiet. I certainly know of no other remedy which will so readily and decisively allay and control the symptoms above enumerated.

* * *

Suggestion is a most interesting magazine devoted to all phases of suggestion. Send to 4020 Drexel Boulevard, Chicago, for a sample copy.

EPILEPSY.

Dr. L. J. Burrow, of Burns, Oregon, wrote the following letter to Dr. W. Towns, Fond du Lac, Wis., under date of September 28, 1903: "My Dear Doctor:—Three months ago I wrote you ordering a supply of your epilepsy cure. With the liquid you sent two kinds of pills or tablets, both of which have been taken. My patient has not had a fit since the first dose of your medicine. He has plenty of the liquid to last two weeks. Now, doctor, if you think he had better take it longer send me six more bottles. I do not care one fig for the expense, only to cure my patient. He has improved in every way, oh, so much. I will only too gladly send a tabulated account of his case from the first dose of your prescription, which was on the morning of the first day of June, since which time he has not had a single attack and has simply made the most wonderful improvement. Now, doctor, if you think he had better take your prescription a month or so longer send it at once.

* * *

My son, who is epileptic, is doing splendidly; has had only one paroxysm in five months, which I am confident was caused by reducing the dose of neurosine. I am determined to persevere in this treatment. Am having many inquiries from physicians as to the merits of neurosine and I recommend it to those who have cases of epilepsy.—Dr. G. W. Games, Hickory Flat, Ky.

* * *

Aletris cordial, Rio, is indicated as a prophylactic remedy against postpartum hemorrhage, uterine weakness, great development of the fetus and of the adnexa, and in those cases in which there is disposition to hemorrhages.

MEDICAL RHYMES

ODE TO JENNER AND PASTEUR.

By Jno. J. Caldwell, M. D., Summit, N. J.

(Continued from page 347, October Recorder.)

Sculptors and painters both,
His form perpetuate;
The poet, nothing loth,
Close to the pure abodes,
Sings high Olympic odes,
And pours his soul in melody along,
While grateful myriads swell
Aloft the triumphant song
Of him who in the might
Of mere unselfishness and right,
Is irresistible.

III.

Such are the deeds of genius wrought,
So self-devoted and so pure,
In the alembic of determined thought,
By Jenner and Pasteur.

IV.

Not long ago
The "Black Death," direst demon of disease,
Drooped his dark wings, in progress sure, though slow,
Over the land and seas,
Where'er he passed, he left
Proof of his holocausts—the earth bereft
Of one-third of the human race.
And all was hid in mystery, no trace
To tell even where his course had run,
Or power by which his horrid work was done.
Then came the foul successor of this dread,
The loathsome Small-Pox, whose mysterious tread
Was fearful in its stillness, as of yore
That which the "Black Death" bore.
Then o'er the hopeless darkness of the past
A clear and cheering light was cast;
As bright and strong as hope in youth
The hand of genius held the torch of truth

And Jenner to the suffering nations showed
The crafty Pestilence in her dark abode,
Overwhelmed in death complete,
Lying prostrate at his feet;
And the spell he taught,
Which brings contagion's power to naught,
"Vaccinia, the Open-Sesame" whose breath
Unbars the gates of "Death to Death."
The nations, freed from terror, lived again;
Disease departed with its ghastly train;
Smiles came for tears
And joys for fears,
And life again had hopes that were not all in vain.

(To be continued.)

SUPPLEMENT.

By I. Miley, M. D., Anderson, Ind.

[Dr. C. E. Boynton's poem, "The Dead Beat," in September Recorder, reminded me of a supplement I once wrote to the Doctor's Christmas Dream.]

The Doctor's Christmas Dream I thrice have read my boy,
And now my heart with sadness fills,
To think that many who the doctor did employ
Refused to pay their doctor bills,
Who are dead, but never reached the golden shore,
As always thought by me and you,
But are found in hades hottest place galore,
Each debt set them back a league or two.
Now when the doctor's view a little better grows,
He'll see the strangers there he sees
Are just exactly like the ones he sees, and knows;
They never paid the doctor's fees.
When all such folks are dead, and take their place in hell,
And satan's lost a woeful pull,
He will rise up from the pit into which he fell
And see his place is just exactly full.
And then we'll hear no more of hell, nor wicked race,
For when the last old scamp into his place is slid
The devil then will quickly fasten up his place,
And forever sit and grin as down he holds the lid.
When the doctor sees the devil's work is done, and each has found his level,
The doctors with the angels, the dead beats with the devil,
He will drop his fan, leave his chair and follow on to heaven.

BRIEF MENTION.

When you need a good sign write Geo. Steere, 256 Clark St., Chicago.

Burnham's soluble iodine is very efficient and has none of the objections of potassium iodide.

The "Dry" hone, made by E. A. Harrington, Waukesha, Wis., will keep your knives and razors sharp.

Fairchild Bros. & Foster, of New York, make a line of digestive ferments which are above criticism.

Extension of the septic products along the vascular highways is prevented by the use of antiphlogistine.

Uriseptin has specific action in inflammatory conditions of the bladder, whether acute or chronic. It is worth trying in your next case.

A satisfactory buggy lamp for physicians has at last been perfected. It is made by the Orendorff Headlight Co., Yates Center, Kans.

Boston Electrical Appliance Co. offers to the profession very reliable electrical appliances at reasonable prices. Send for a catalogue.

Dr. E. J. Kuh, of Chicago, says: "I have used iodo-nucleoid during the past few months in the place of the iodide of potassium, and have found it far more satisfactory."

For the treatment of afte[illegible]s Hayden's viburnum compound is a reliable anodyne and antispasmodic, and its adminstration renders all other remedies superfluous. Unlike the opiates it does not produce constipation or gastric disturbances, but promotes perfect comfort without any deleterious action.

We have used H. M. Herrell Co.'s syrup pinus compound for several seasons and find it superior to most other brands. It has the advantage of being stronger in drug value, and instead of a minute dose of morphine, contains an anodyne dose of ammonium bromide, thus avoiding the dryness of the throat which usually follows the use of morphine in small doses.

If you wish to invest some money in a good thing read the advertisement of the Motzorongo Co. This company has a fine property and will soon pay good dividends. This is the last opportunity to get stock at the present price. In December the price of stock will be raised, so it will be necessary to act at once, if you wish to get the present price, which is a real investment bargain. The booklet which the company has issued is very interesting.

Success for November is a large number, containing a variety of good articles. A few of the leading articles are: "John Hay, A World Leader in Diplomacy" by Walter Wellman; "The Romance of Savings Banks," by John Gilmer Speed; "Extracting a Fertilizer from the Air," by Herbert Wallace; "The Red Squirrel's Thanksgiving," by William Davenport Hulbert. Success should be one of your magazines for next year. Our club combinations with Success are worth dropping a card for.

The Wisconsin Medical Recorder.

A Monthly Journal of Medicine and Surgery, Devoted to the Best Interests of the Whole Profession.

VOL. VI. JANESVILLE, WISCONSIN, DECEMBER, 1903. NO. 12.

LEADING ORIGINAL ARTICLES.

HEMORRHAGE AND HEMOSTASIS.

By Thomas H. Manley, M. D., Ph. D., New York.

A Clinical Lecture Delivered at the New York School of Clinical Medicine, July 6, 1903.

Gentlemen: This morning it will be my purpose to briefly discuss a few points bearing on the excessive loss of blood and the means which we possess to limit or control it in various surgical operations on the human body.

The excessive loss of blood by primary or secondary hemorrhage is by all odds the very greatest danger which we must confront in all major surgical operations; and hence, economy of blood waste with prompt and definite arrest of hemorrhage is a matter of dominant importance with all who would do their full duty to the patient, and win for themselves the largest measure of gratitude.

A large and sudden gush of blood from a vessel deeply lodged will try the nerve of any operator, however habile or experienced; with the timid tyro, it is a moment of peril to the patient and of terrible stress to himself.

The fear of mortal or dangerous hemorrhage restrains the most skillful operator at times from attempting the removal of growths the source of danger to life, or great suffering.

If you would guard against the dangers from hemorrhage, or prevent the undue loss of blood in the vivisection of the body, there are certain prerequisites indispensable. First, you should not only know anatomy well, the deviations in the course of the vessels and the effects of pathological changes; but, you should be well fortified against accident in the course of operation; you should only operate under good light, with ample assistants, have a full supply of hemostatic instruments; and, from the start to the finish, keep constantly in view the importance of ligating off all large vessels before dividing them, when this is possible.

But, we may be called at times in great haste to arrest accidental hemorrhage from a wound, when perchance, no assistants are at hand, possibly late at night.

When the wound is in the periphery of the body, unless a main arterial trunk is divided, we may encounter no great difficulty. Let it be remembered that in ninety-nine times out of a hundred, when the physician is called, the hemorrhage is arterial; a bandage with moderate pressure will subdue

bleeding from a surface vein, but it will seldom effectively check arterial hemorrhage. In large bleeding from division of the deeper arteries of the hand or foot, I am acquainted with no expedient so simple and effective as the temporary transfixion ligature, which, as you see, is the essence of simplicity and safety. You use a course cambric needle with any kind of strong fibre, cotton, linen or silk, pass it through all the tissues, from within out, in such a manner as to include the open vessel, secure it with a small pad under each loop of the ligature and tie firmly, but not so tightly as to induce gangrene. After twenty-four or forty-eight hours, this is removed. You have mutilated nothing and quickly controlled a very difficult and dangerous type of hemorrhage.

In general, when operating with a view of controlling bleeding from a puncture or laceration of an artery of one of the extremities, an Esmarch bandage or any description of an elastic constrictor, by inducing artificial ischemia will serve a useful purpose in rendering the field dry.

In all this class of cases, except those noted in the hand and foot—their palmar or plantar surface—we cannot rest secure, unless we have fully divided the tissues, exposed the bleeding vessel and effectively ligated it.

At times, by the force of circumstance, immediate hemostasis by ligation of the vessels may be impossible, but the bleeding must be arrested. Here we must depend on styptics, packing, pressure. Now immediate dangers are past, we may later consider more radical and effective measures as a consecutive procedure.

Bleeders or hemophilic patients belong to a desperate class, when the source of hemorrhage is deep. Nothing acts so well in these cases as the actual cautery to deeply sear everything in the seat of oozing.

Secondary hemorrhage we should be always on our guard for in any operation involving extensive division of parts. It has been said that there is never secondary hemorrhage when the work of primary hemostasis has been effective. This is no doubt in a large measure true, and yet, it may occur when the greatest deliberation and caution have been observed in suppressing all bleeding while operating.

A ligature may slip, a knot loosen, a thrombosed vessel reopen, or what happens most commonly, there may be excessive vascular reaction, and several vessels reopen which had been the seat of temporary vasomotor paralysis succeeding cardiac shock.

Hemorrhage arrested we turn our attention to the general condition of the patient. Transfusion or hypodermoclysis with saline solution is no doubt of great value in operative hemorrhage, when our patient is under an anesthetic, though its value has been greatly overestimated. In accidental blood loss, in internal hemorrhage, or that from the passages it is rarely if ever called for.

One who has had a large exsanguination always suffers from thirst, the economy clamors for fluids. This is is gratified and the demand best satisfied by refrigerant drinks. Under similar conditions, when we fear emesis, enemeta may be given with advantage, the warm being always best sustained.

We must be cautious about the employment of morphine here, as the loss of blood greatly augments its narcotic power. Whether we should give alcoholics or not is a mooted question. My own experience, however, has been that they are highly helpful when the cardiac depression is great and the patient suffers from a sense of asphyxia and is in a state of great alarm. They impart a sense of exhileration, buoy up the drooping spirits and give

tone to the flagging circulation. In large hemorrhage one bears heavy usage of alcoholic spirits without showing any signs of intoxication.

PRACTICAL ELECTIVE SURGERY FOR THE GENERAL PRACTITIONER.

By Charles C. Miller, M. D., 100 State Street, Chicago, Ill.

(Continued from page 362, Nov. Recorder.)

THE CLOSURE OF WOUNDS.

SUTURES.

Sutures will prove most useful in a majority of cases. The continued suture will be placed most rapidly. It has the disadvantage of promoting the extension of infection along the wound if one point be infected.

The plain interrupted suture will be used a great deal. This method of suturing is one of the slowest. Infection is not carried along the wound by such sutures and good approximation can be secured.

As a means of securing quicker approximation with interrupted sutures, the mattress suture has found favor in some cases. It is a good method to employ subcutaneously, but is not entirely free from objections for the skin.

The subcutaneous suture is used by some with a view of preventing stitch marks along each side of the line of incision. These can be of absorbable material and used as the ordinary interrupted, continuous, mattress; or some special form of application may be used.

The continuous subcutaneous suture can be used of non-absorbable material if we wish by practicing an in genious technic recently advanced. The suture is to be knotted and then applied as a running continuous stitch through the tissues.* For the purpose of holding the two extremities of the stitch perforated shot can be used with greater convenience. The material used by choice is silk worm gut. When the suture is of no further use it is removed by traction upon one end after cutting the knot or shot from the other. The suture will prove very useful where a subcutaneous stitch is desired and the operator has no reliable sterile gut of suitable size. Deep tissues can be approximated by this technic.

ADHESIVE STRIPS.

Where wound secretions are not to be taken into consideration, the adhesive strips will prove effectual in closing superficial wounds. If there is any amount of secretions discharged, they will soften and loosen the strips and should not be used. They can be applied so as to get good close approximation of the parts, and may be left intact for a number of days.

SUTURES APPLIED WITHOUT ANESTHESIA.

The physician will often be called upon to suture a superficial wound, and will not find it convenient to use any form of anesthesia.

For these cases I would urge every man to supply himself with one or two conjunctiva needles. These can be grasped in a hemostat, and cause no more pain in inserting than does the prick of a hypodermic needle. They possess a great advantage in causing much less fear than the large needles so often used. Fine silk is used with them.†

*By traction upon the ends of the suture after it is applied approximation of the wound is secured and the suture is maintained taut by knotting each end.

†When the practitioner is seeing emergency cases at intervals it is a good plan to thread several of these, place them in a two dram vial of alcohol and boil thoroughly, then keep in the same tightly closed. Such a vial can be carried about in grip or saddle bags until needed.

FIG. 10.

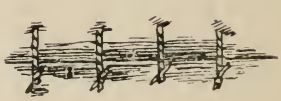

FIG. 11.

Fig. 10. The continuous suture to be used as a rapid and convenient method of approximating tissues. Where general anesthesia is used the operator will find that he can save much time by using an extra long and large needle and dispensing with needle forceps. While the needle holder is a useful instrument, indispensable in some cases, it is at the same time a great time waster. Where needles are to be used without an anesthetic or with local anesthesia the smaller the size the better for the operator, as small needles very favorably impress patients.

In removing the continuous stitch cut every loop so that there will only remain the straight cross strand to slip through the tissue. So many men will try to remove a continuous suture by drawing through several loops or segments at a time. This will be more or less painful and patients invariably magnify this pain afterwards.

Fig. 11 shows the interrupted suture, which is the most popular with surgeons. It does not deserve its popularity. In many instances where used, others would be more efficient and more quickly applied.

FIG. 12.

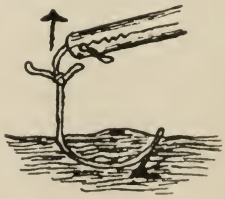

FIG. 13.

Fig. 12 shows method of removing an interrupted suture. The direction for traction after cutting as in Fig. 12 can often be improved upon as Fig. 13 shows. Silk sutures and deep silk worm gut sutures, as the through and through abdominal suture cause pain when removed, particularly if the traction is made as in Fig. 12.

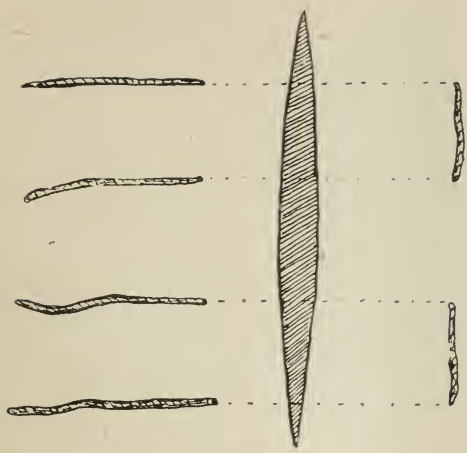

FIG. 14.

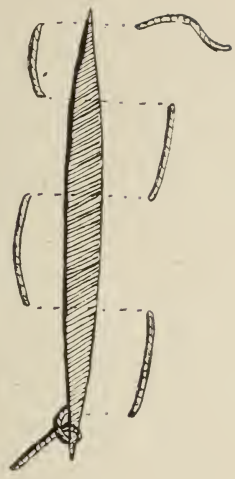

FIG. 15.

Fig. 14 shows the mattress suture, which is seldom used in the closure of skin wounds. This is a useful suture in subcutaneous approximation of tissues and very useful in intestinal work.

Fig. 15 illustrates the quilt suture, which may be used to an advantage in certain cases.

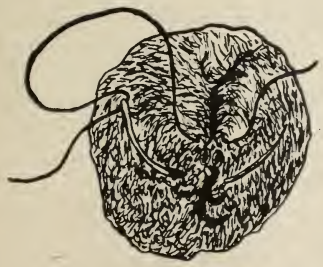

FIG. 16.

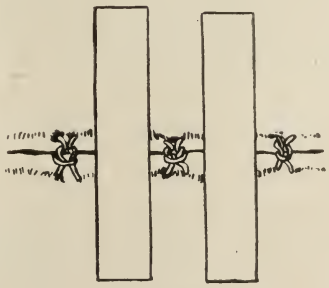

FIG. 17.

Fig. 16 shows a mattress suture which serves the double purpose of approximating the tissues and also occludes a rather large vein and artery. All methods of suturing will be found useful in controlling hemorrhage, where the sutures are properly applied with this in view.

Fig. 17 illustrates the use of adhesive strips as means of perfecting approximation of superficial parts. Adhesive plaster alone is seldom satisfactory for holding parts. Moisture will cause it to loosen and we are never quite sure we can prevent wound secretions from loosening our strips no matter how carefully applied. Every few years some operator raises a hue and cry recommending them, but after actual tests I would urge my readers never to rely on strips alone. In conjunction with sutures they are sometimes useful.

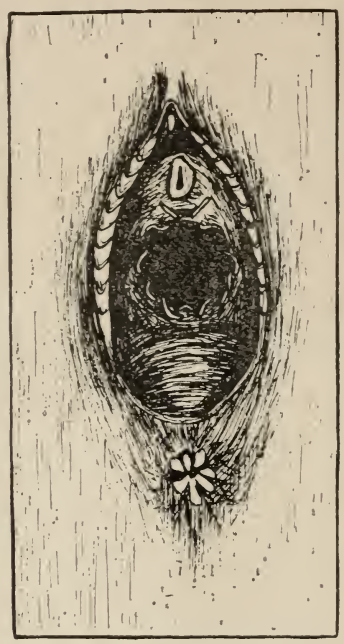

FIG. 18.

Fig. 18 illustrates the purse string suture, which will be found useful in quite a few instances. Here an approximation of the mucosa of the vagina is secured by tightening the suture. In not a few cases following this particular operation relapse occurs of the cystocele, the condition, which demands the operation. The operation is very simple and easily performed by any practitioner. I use this particular illustration in calling attention to the suture in order that I may at the same time warn the practitioner not to promise a cure which will be permanent in all cases of cystocele. Failure of this operation will not in any way prevent the adoption of more radical measures for the relief of the cystocele. In tying a purse string care should be taken not to allow tissues to press up and become strangulated by the suture.

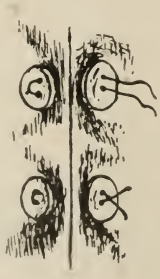

FIG. 19.

Fig. 19 illustrates the button suture, which was formerly in great favor. Today we seldom use these sutures as union, in the absence of pus formation, is prompt, and where the parts are not readily united we secure approximation without tension by undermining. Always remember that tissues widely separated can very often be approximated with ease by simply undermining for a variable distance.

For the scalp I am fond of using a very small needle shaped like a straight Emmet cervical needle. This needle is very strong and can be forced through the toughest tissue when enclosed in a hemostat.

(To be continued.)

WHAT CONTROLS THE SEX?

By A. N. Ogle, Ph.G., M. D., Texarkana, Arkansas.

Professor of Anatomy and Pediatrics in the Gate City Medical College, of Texarkana.

The exact reason why that one woman gives birth to a male child and another to a female, and why the same women gives birth one time to a boy, and again to a girl is, a thing yet to be determined. However, I believe a little observation and study would greatly enlighten us on this subject.

I, having lived on a farm and observed a great many pregnancies in animals, have noted that the sex of the offspring is as a rule that of the weaker parent, and that an animal with unusual development, most always gave birth to the oppcsite sex, the exception being when mated by one of equal development.

In a flock of sheep owned by my father, an east Tennessee farmer, was one large, healthy, vigorous ewe, and each spring she dropped a fine ram lamb. In the same flock were some small ewes that were always thin in flesh and they seldom failed to give birth to ewe lambs. One dry season about breeding time the ewes were all poor. A fine robust ram was put with them, with a result of eighty per cent. ewe lambs.

Probably seventy-five per cent. of all men most resemble their mother, and an equal number of women most resemble their fathers. Few great men have lived who did not have great mothers.

The majority of children born of newly married parents are girls, which can be accounted for by the fact that the newly married woman is often not well developed sexually.

It has been claimed that children born to very old women are most always girls. It is a fact that the majority of children born to parents who were never married are boys, which we account for on the ground that such women are excessively developed sexually.

Under my own observation has come one man whose sexual appetite was very weak. The sexual appetite of his wife was extremely strong. Their children were all boys.

Then we conclude that the children born of parents who are not equally developed sexually, will, as a rule, be that of the weaker parent. That the children of a man or woman, whose sexual developement is excessive, will be the opposite sex, and that the children of parents who are well mated sexually will alternate boys and girls.

OUR FOOD.

By J. L. Wolfe, M. D., Cedar Falls, Iowa.

While it is of momentary importance what we shall eat or what we shall drink, we would pay respect to quantity and quality as well. More people die prematurely from abusing their stomachs, than from all other causes combined. People who govern their appetites as they should, are scarce; and we should regard that man as the very personification of self control who never ate or drank more than he needed. If any reliance is to be placed upon the declarations of physiologists, they show that mankind habitually eat over one-third more than

they require, and it must be remembered that this overplus not only does no good, but does a positive harm.

It is impossible by weight or bulk, to designate precisely the quantity required by each individual. A moderate meal for an out-door laborer, would be an enormous load for the sedentary student. Other things being equal, the more we exercise, the more we have a right to eat. The temperature of the weather, too, has an influence upon the calls of the system. Cold in itself consumes certain elements of our food, and requires a more liberal supply. The growing child needs more in proportion to its size, than the adult. Thus, all those dietetic regulations which prescribe food by ounces and pounds, are erroneous; and the best regulation is a natural, well controlled appetite, not such as has been acquired by over-indulgence, not such as is pampered with condiments and flavorings, but as originates from a true legitimate want of the physical frame-work. The rule as to quantity, should be to eat the minimum required. When the first feeling of fullness is felt it is always time to stop. For the gormandizer seeking reform, the only method is, never to eat quite as much as the cravings of a morbid appetite would suggest. The danger is in repletion, not in starvation, and he should be on the safe side.

When a change is made from an active to a sedentary life, when the state of weather is such as to prevent the usual out-door exercise, or when there is any temporary disorder of the digestive functions by a diminution of the quantity consumed, we may prevent much further trouble.

Food should be eaten leisurely. Rapid eating is, in itself, considered independent of mastication, an evil. Mashed potatoes, apple sauce, or anything of like character, is not so easily digested when hurled down the throat without being properly masticated. For this there are two important reasons. Nature has provided about the mouth, certain glands which secrete a fluid of an alkaline nature, which we call saliva. The food mixed and moistened with this, is better prepared both for swallowing and digestion. Then, again, when at rest the stomach is contracted and expands under the stimulus of food. This expansion is gradual; and if food is received too rapidly, the capacity of the stomach is not prepared for it; consequently, it is important that the food should be well masticated. The human stomach was never intended to receive pieces of food of any kind. It is not provided with an appendage like the stomach of the cow, nor with gizzard like power of fowls and birds, nor with teeth similar to some of the lower animals.

Food should be taken at regular intervals, and not too frequently. The heart is designed to beat constantly and continually until death; and like it, the lungs asleep or awake, at all times, and under all circumstances, must be acting. Not so with the stomach; it must have rest and time to recover from the energy of digestion. This has been proven both by experience and actual observation. In the space of twenty-four hours, this rest should not be less than fifteen; nor should this all come at once. Each meal should be fully reduced, the stomach emptied, and for a time quiet before it is filled with food. The breakfast should be early, and may with propriety, be the heartiest meal of the day. Dinner should follow no sooner than six hours and as many hours after, the supper. Avoid eating between meals if possible, as it is one of the most ruinous practices for the stomach that can be indulged in.

Thus far we have said nothing in reference to what we should eat, and although most writers on this subject dwell largely on this point, we consider, however, that it is the least important,

matter in the regulation of the digestive system. He who eats only enough, chews thoroughly and eats regularly at sufficiently long intervals, taking regular exercise, may eat anything eatable with impunity. And he who cannot, his own experience is at least deserving of being compared with the theory of the physicians before the latter is prepared for correct advice.

There is less refuse matter from animal, than vegetable food; the former remains longer in the stomach, and is more completely as well as more readily taken up by the system. The fat of animal food is a still higher step in the process of digestion, and it is appropriated with less change than the muscular fiber. The tenderness of meat is much dependent upon fatty matter between the fibers of flesh, and the rapidity of digestion is much affected by this.

But although animal food is more digestible than vegetable, it does not follow that it is always preferred. Bulk, mixture, the state of the stomach, the mode of preparation, and the demand of the system for material not contained in animal food, all point to man as a being whose supply is not to limited by any such restriction.

PHYSICS OF THE X-RAY.

By Dr. Gordon G. Burdick, Chicago, Illinois.

Chief Surgeon People's Hospital; Professor Radio-Therapy and Photo-Chemistry, Illinois School Electro-Therapeutics; Associate Professor Surgery, Post Graduate Medical School; President Chicago Electro-Medical Society.

(Continued from page 364, Nov. Recorder.)

A wonderful and instructive study can be pursued by anyone with a little mechanical ability by studying the effect produced upon different minerals and matter of various kinds when submitted to bombardment from these negative corpuscles, driven under the influence of the electric current. It seems that the coarsest and meanest form of matter immediately becomes a thing of beauty. The energy of the corpuscles being absorbed, it imparts a form of motion to each kind of element that may be used and causes its corpuscles to vibrate at certain definite wave lengths. Entertaining the experimenter with some of the most beautiful play of colors as clear and characteristic for each form of matter, that qualitative analysis is possible by means of the spectroscope, all the different rates of vibration in the known spectrum may be obtained, as well as mixed rates not seen by any other method. We get the spectrum of a complex molecule on so grand a scale that large audiences may enjoy the display as well as the operator.

A fair degree of knowledge of glass blowing, and the shaping of suitable metallic supports, as well as a good mercury pump is all that is requisite. The tube can be excited by the means of a small coil that will give an eight inch spark. Any piece of earth, rock or compound substance may be used, and no matter what is used the operator will not be disappointed, but will have an instructive and interesting tube. The various compound minerals that are found at any mineral supply house usually give the most brilliant results.

By studying the effects of this form of motion with the various elements a vague idea of the mysterious but wonderful forces of nature, that have wrought the sideral universe, may be carried on, and point out to man the path to be pursued, if the problem of creation is ever to be solved, and at present enable us to get a clearer understanding of the electro-magnetic disturbance that we have called the X-ray. It should be born in mind,

however, that the negative corpuscles are susceptable to the slightest changes of polarity and travel at an inconceivable speed, being limited only by the medium through which they pass.

The velocity obtained in space is too inconceivably rapid to be detected by any human sense, and as the electromagnetic disturbances reach us from the sun they appear only as light and heat after they have passed through the enormous atmospheric ocean that envelopes the earth; this having a tendency to retard the speed of the corpuscles and slow their rates of vibration, due to the friction and pressure of the atmosphere until finally they appear as light and heat. We are prone to forget that we are mere land crabs living and having our being at the bottom of a vast ocean, and that the pressure upon our bodies amounts to as much as 14 pounds to the square inch and that the fluxuation takes place twice daily, due to the attractive influence of the sun and moon. Considerable sympathy has been given the animals that have been dredged from the bottom of the ocean where the light of day cannot penetrate, but even at this depth nature has apparently supplied the oversight by coating the bodies of the dwellers of the sea with a substance that floureses under certain radiations and emits light and heat, and the proposition has been boldly advanced that radiations are given off from the sun so inconceivably rapid that they cannot be detected at the surface of the earth, but after passing through the earth, or through some miles of water, have been slowed in vibration enough to cause flourescent effects upon the bodies of the inhabitants of the deep. It must not be forgotten that the bottom of the ocean is covered by ooz, the remains of myriads of dead shell, bearing animals, exceedingly minute but retaining enough silicates, carbonates, etc., to absorb these vibrations of the sun, and possibly the bed of the sea is not so dismal a place as many scientific men would have us believe. One thing has been thoroughly demonstrated, and that is the fact that deep sea animals have well developed eyes, and without light the eyes would become rudimentary as happens to the curious fish that live in the Mammoth cave of Kentucky, so that it can be readily seen the uses that nature puts these small particles to transmit enormous quantities of energy to the distant planets that are held in the sway of the mighty orb, the sun, and all calculated to support life under conditions that appeal to human beings as absurd. If life can exist at the bottom of the ocean, under tons of pressure, and at a temperature below zero, why not upon some of the other planets that are included in our solar system? Apparently nature transforms energy only for the uses of living things, and the only limitations of life, so far found upon the earth depends upon the thermometer.

Elements have always been considered as unchangeable matter, since the alchemists gave up the idea of transmitting lead to gold, still at the dawn of the twentieth century man actually saw the birth of a new element. Professor Ramsey, while investigating the wonderful and contradictory new discovery by Mr. and Madame Curie called radium, watched the gases given off from the substance and marvelous to behold they gradually turned under the powerful eye of the spectroscope to helium. A discovery of this kind is far reaching into its importance upon scientific thought, and will stimulate synthetic work in the chemical line. If one element can be changed to another, farther changes should be possible and we are gradually approaching a hypothesis that has been advanced cautiously for some years "That Electricity is Matter".

(To be continued.)

THE COURSE AND TREATMENT OF BURNS--CASES.

By F. F. Casseday, Ph.B., M. D., Rosemount, Minn.

Burns may be produced by contact with any hot substance, direct application of fire from burning wood or coal, kerosene, gasoline, illuminating gas, any boiling fluid, or steam. Kerosene is used so much to start fires that it is one of the most prolific causes of burns, though gasoline, owing to the general use of gasoline stoves, is also responsible for an increasing number of fatal accidents. Gasoline generates vapor so rapidly that it is especially dangerous. Gasoline is often mistaken for kerosene, and used to start fires, with fatal results. Minnesota now has a law which provides that all containers used for gasoline shall be painted a bright red color. If generally observed it will lessen the number of accidents from the careless use of gasoline.

Burns are classified under six degrees, and vary from a simple erythema to destruction of the entire part. When a large portion of the surface of the body is burned a patient may present burns of every degree.

When from one-third to one-half of the surface of the body is burned the prognosis is very bad—practically hopeless. This is usually the case though none of the burns are more severe than the third degree. Exceptions will, however, be noted to this rule in rare cases where burns reach the fifth degree and deep fascia is penetrated and muscles are involved, but exceptions of this character prove the rule.

The constitutional effects of burns are:

1. Shock and internal congestion. Especially marked in burns of head and trunk. Patient very cold, pulse weak and fluttering, surface cold.

2. Inflammation and reaction. Usually occurs one to two days. Thirst and fever. Internal congestion may lead to inflammation producing pleurisy, pneumonia, peritonitis, or meningitis, according to the seat of burns and amount of surface involved.

3. Suppuration and exhaustion. Occurs on separation of sloughs. There is often cough, diarrhea, suppression of urine, and death may result from septicaemia, exhaustion or amyloid degeneration.

The majority of fatal cases perish from shock and do not survive longer than forty-eight hours. Fatal cases, which survive longer, usually terminate from the twelfth to fourteenth day, and cause of death is generally intestinal ulceration, peritonitis, nephritis or exhaustion.

The treatment of burns includes:

1. General.—For shock external heat by hot water bottles, adrenalin 1 to 5000 internally and in eyes, ammonia, atropia and morphia. For inflammation meet indications as they arise. Liquid nourishment in small quantities and at short intervals.

2. Local.—All applications should be made under antiseptic conditions. For burns of first, second and third degrees wash thoroughly with 1 to 2000 bichloride solution, or a few drops of 40 per cent. solution of formalin (formaldehyde) to pint of hot water. Then apply carbolated petrolatum covering the burned surface thickly and evenly. Best applied with flat table knife. Cover with plain sterile gauze, absorbent cotton and roller bandage. It will be necessary to sew on outside bandage in majority of cases, as patient scrapes dressings off, particularly if burns are located on buttocks or back. Change dressings second day, and subsequently as often as required. Too frequent dressing retards cure. Iodoform and iodoform gauze are highly esteemed by some, but I prefer carbolated petrolatum,

and picric acid. Petroleum dressings are easily removed, and do not stick and drag off the tender granulations when healing begins. Under carbolated petroleum dressings rapid healing is secured and there is less suppuration and sloughing. As a matter of course where there is much sloughing and destruction of tissue wet dressings may be required until sloughs are removed and burns become granulating surfaces or cavities. Pure olive oil is also used in burns. For a first application to relieve pain a saturated solution of washing soda sterilized by boiling is useful. Carron oil (equal parts olive oil and lime water) is also useful. The picric acid solution (picric acid 25 grains, alcohol 2 ounces, water 2 pints) is useful before granulations begin. Peroxide of hydrogen (dioxygen) is useful for cleansing after suppuration begins. Iodoform is dangerous for large surfaces as severe poisoning may result. Bichloride solutions for steady wet dressings I also reject for same reason. Carbolated petroleum dressings I prefer to any other form of dressing. It gives immediate relief and allays inflammation, is cleanly and easily removed without causing pain or injuring parts. In severe sepsis 5 to 10 per cent. ichthyol ointment is very useful. In extensive burnt surfaces after sloughs are removed and burns become granulating surfaces skin grafts should be used. Puncture vesicles, but avoid removing skin. For pain in all stages opium is indicated, while for nervous restlessness and insomnia somnos is useful.

Case 1.—Boy, nine years of age. Burned by steam on anterior and interior aspect of leg from knee to ankle. Third degree burn. Used carbolated petrolatum, sterile plain gauze, absorbent cotton, and roller bandage. Washed with formalin solution. Healing rapid and no pain after second day. No opiate required. Recovery. Decided scarring, but little contraction.

Case 2.—Miss D., age twenty-nine years. Burned with hot water from overturned kettle of boiling water. Left leg burned from two inches above patella to ankle on inner aspect of leg about the width of a man's hand, and right leg four burned spots from two to four inches in diameter on calf and front of leg from knee to tip of toes. Second, third and fourth degree burns. Washed with formalin, and applied carbolated petrolatum, sterile plain gauze, absorbent cotton, and bandage. Very little pain after second day. No opiate required. Healing rapid. Decided scarring on calf of left leg and slight contraction. Recovery. Healing was complete in this case with carbolated petrolatum dressing, and nothing else, except formalin wash.

Case 3.—Mary K., Bohemian, age twenty-one years. Fat and weighed 150 pounds. Poured kerosene on burning fire. Fire flashed in her face and set fire to her clothing from head to feet. Clothing literally burned from her body. She ran into the yard a mass of flames, a man grabbed her and dipped her into the water tank in the barnyard, extinguished the flames, and carried her to house. The entire surface of her body was burned except her face, feet and front of legs from knees down, two spots size of a man's hand, one on abdomen and other under right shoulder blade, and strip two inches wide on right arm. Burns were from first to fourth degree. Her abdomen and breasts were very badly burned. The burning and immersion in the cold water produced shock. Under external heat, adrenalin, atropia, and morphia, she recovered from shock after fifty hours, and felt very comfortable.

Dressings were formalin wash, carbolated petrolatum, sterile plain gauze, absorbent cotton and bandages. Opiates and stimulants were necessary from the first. Liquid nourishment was given in small quantities at short intervals and included malted milk,

beef juice, milk and white of egg, hot milk, at different times. Urine was normal in amount and not suppressed or retained at any period of her illness. Up to tenth day, with exception of vomiting, which occurred at intervals on second and sixth day, nothing eventful occurred. Her mind remained clear until the tenth day, when mild delirium set in, accompanied with exhaustion. From this she rallied slightly, and died quietly at 3 a. m. on the thirteenth day. The immediate cause of death was, in my opinion, duodenal ulceration, though I was unable to verify my diagnosis by a post mortem examination. The girl was large and fleshy, but rather soft and flabby. The shock was sufficient to produce death immediately, but her youth and vitality carried her to the thirteenth day.

MEDICAL CARE AND TREATMENT DURING GESTATION.

By J. A. Burnett, M. D., Little Rock, Arkansas.

From the first of gestation until the end of the puerperium women should be under the supervision of a competent obstetrician, as under definite routine management, the number of maternal deaths due to child-bearing would be much smaller than if not under the care of an obstetrician until labor begins, as is the case in most instances, especially in the country and small towns.

If obstetricians would insist on this and charge a good liberal fee for their services it would be much better both for them and their patients, and the practice of obstetrics would be elevated to the dignity of an art instead of sinking to the level of a midwife's intelligence.

The regular medical profession has at all times fought all forms of quackery, but they have sadly neglected the midwife abuse. Why should a physician be compelled to have licenses to show his fitness to practice his chosen profession when midwives are turned loose on the public who have no knowledge whatever to practice the most important and responsible branch of practice a physician is ever called in contact with? Is there any justice or reason in such a law? Is it not like "straining at a gnat and swallowing a camel?" It seems as though our legislatures could be made to see the fact that all should comply with the medical law who wish to practice medicine or any branch of medicine. It is justice that all should have equal rights and special privileges to none.

When a woman supposes herself pregnant aud puts herself under the care of a physician the first object of the physician should be to determine whether or not she is pregnant as a physician's reputation would not be enhanced by the fact that he had made preparations for the confinement of a woman who had not conceived.

A good deal of tact should be used in making a diagnosis of pregnancy. If a patient really wants to be pregnant and the physician is unable to determine the actual fact he should tell her she is in all probability pregnant and that in a couple of months the matter can be settled definitely, and vice versa. If a woman should be plainly told that it was impossible to diagnose her condition she would very likely consult a more tactful practitioner.

During gestation we should see that our patients get plenty of out door exercise, walking, riding, in fact, any mild exercise, for there is no time in woman's life when she needs more pleasure, for she is moulding the disposition and character of a future being. Where anything surrounds her which is a source of annoyance to her it should be removed or corrected, as

far as possible. The patient should be advised to drink freely of good water and should have a bath from two to seven times a week during the latter months of gestation. When giving these baths plenty of soap and water should be used, finishing with cold water or a cool shower; then rubbed briskly with a coarse towel so as to bring the circulation to the surface, thereby reducing internal congestion.

Many disorders during gestation can be prevented by properly regulating the diet and every day habits. The diet should be of a nourishing character, easily digested and of a sufficient variety to stimulate the patient's appetite. When there is a longing or desire for a certain food it should be allowed, for in so doing we often supply the very ingredient which the system requires to allay nervous reflex irritation.

The urine should be examined every month during the early stages of gestation and much oftener during the latter months, especially if any kidney trouble is detected. The genital organs, heart, lungs, etc., should be examined at regular intervals.

Dress is an important factor with all women during gestation. The corset must be discarded as soon as pregnancy takes place. All clothing should be loose and only of sufficient amount to keep the patient comfortable. It is best that all clothing should be suspended from the shoulders as this will prevent pressure on the renal arteries and veins and often prevent serious trouble with the kidneys.

At times symptoms of toxemia increase with such rapidity that unless watched closely the patient soon passes into a dangerous condition. In this condition don't forget echinacea augustifolia.

Headaches should not go unnoticed, as they are complicated with constipation and poisoned blood from fecal retention. Abbott's saline laxative followed with W. A. intestinal antiseptic, will be of much value in this condition.

From the lack of lime in the system the teeth often ache or rot and when this is the case calcium lactophosphate is the remedy. It should be given steadily for a considerable length of time in order to secure the desired results.

Nux vomica is a grand spinal remedy. It holds under its control the physics governing the generative organs. It is often very useful during gestation for bitter vomiting constipation, with frequent urging to stool, alternate constipation and diarrhoea, and many other conditions. Don't forget the indications for nux in all cases of gestation.

Vomiting of pregnancy is often controlled with cerium oxalate, but in all such cases the cause should be found and removed.

In threatened miscarrage viburnum prunifolium in large doses in most cases is the best remedy. Viburnum opulus is also very useful in threatened miscarriage, and is our best remedy for intense cramps in the uterus or legs during gestation.

During the last months of gestation the bowels should be kept open by mild laxatives. It is claimed by many writers that calomel is an excellent laxative during the last months of gestation, but I would prefer Abbott's saline laxative and Wm. S. Merrell's normal tincture of chionanthus, chionia or pavara pills.

Caulophyllum or cimicifuga or Girard's uterine tonic given for several weeks before the expected time of confinement is of much value to prepare a patient for an easy labor.

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The elimination of half an ounce of alcohol requires the expenditure of enough vital force to perform a day's work.—J. A. Burnett, M. D.

PHYSIOLOGY AND PSYCHOLOGY.

By Herman Gasser, M. D., Platteville, Wis.

(Concluded from page 333, Oct. Recorder.)

It is always and forever the idea, the unity, that works constantly and contiuously in its creative and constructive purpose. As surely as our idea is the consensus and unity of all the architectural force of creation, so must the infinite idea be the directive and purposive reality. The world is not only a physical system of constructive forces; it is infinitely more; it is an idea. After we have resolved all its constructive physical phenomena into a scientific system of relation we have only woven it into an idea a unity, into the phenomenon. What is this? What is its ultimate reality and purpose?

Again, that our individual idea is a phenomenon, unity or world, woven out of the infinite idea, phenomenon or world. In this court we cannot hope to get an ultimate verdict for our case, as our cause is a part of the court; indeed, is of our own creation, the terms of which in each are bounded by the same limitations of our experiences; the limit of our knowledge, and we call it a phenomenon.

This is not the end of our study, for we still have a relation, and although it is of kind with its limitations, yet gives no special promise of solution. Its existence at least justifies us in formulating and deducing some legitimate conclusions in harmony with them. That these cannot be wholly wrong, what we know demonstrates. That the opinions and conclusious must be varied, it is only necessary to state that in this court each one tries himself, is his own lawyer, furnishes all the evidence, which is his experience, and makes up his own verdict. This is the measure of his world philosophy and ideal religion. In this court the simple and uneducated man has as good and great a right as the most cultured. Indeed, it is remarkable that the former often have a more clear and pure idea of their world relation than the latter. At best it is only a question of amount of detail between them; the idea is the same. The latter by their special study, common observation shows, too frequently lose sight of the world idea in their special details, and in reality is often only a cultured and narrow fad. In their chase for knowledge they have become lost in a special narrow path in the vast sea of the unity of truth.

In following our analysis we feel justified in formulating it into the conclusion that our idea in the idea is as enduring and immortal in this infinite scheme of creation as is the architecture of our body in the architecture of nature. We believe our individual idea is finite, lives for a day, is mortal, while the infinite is immortal. This, at least physically, our evidence demonstrates is not wholly true. Our mortality is only an individual bead in the endless existence of the idea or unity of its creation, with its source in the beginning and its continuance to the end. In this immortal stream the individual is the finite but immortal measure, the purpose and end of which is the great problem that engages and occupies our attention. We all wish, strive and hope to believe and know that this individual life that rises into special being in the immortal physical stream of life and creation may continue on as such forever, be an infinite life or idea to sit at the foot of the throne of the immortal life or idea.

This is a wish, hope or conclusion in this court of last resort that is

not supported by our physical evidence; for our individual immortality it gives us no hope. But this is the court of the idea, the creative unity of the world in which it has already been demonstrated that the physical immortality of nature and man is an idea the very existence of which is a demonstration that it is a purposive, creative and constructive work, through the physical architecture of which it is unfolded or manifested to us. We know the lawful system of nature in its analysis is our idea of it, but what the idea is, is the unknown quantity. Our idea is a reality, but the limit of our knowledge, we cannot get behind it, and again we are in the court of last resort. Here we rest our cause for each must plead his own case, be his own judge, work out his own verdict, for the problem finally resolves itself into: What is the ultimate idea, purpose and end of the scheme of creation? Why and what for did it create my idea? Is it not a related child of the infinite? Does not this inspire us with individual hope and aspiration that we may come ever nearer to its perfect reality? This court always remains open. The only verdict is of our own creation. That we will not attain all the aspirations of our hopes will probably be true. Disappointments in it as in the courts below will be our lot, although the infinite scheme of its ideal and immortal purpose will work out its own destined existence wherein we will be rewarded in full measure for the part we played in it. Even if in the end it should be that our individual life is but a mortal idea in the immortal stream, our good work would not be in vain; besides the immediate rewards of health, strength and happiness, it would be impressed and transmitted to the future. And if our ideas as our bodies are resolved back into and assimilated by the primitive unity, it would not be all loss, with the dissolution of our hopes, loves and pleasures, the hates, pains and disappointments, will find the same restful sleep in the bosom of the immortal unity. Such a consummation is, by a large portion of mankind a thousandfold more devoutly to be wished, than a system in which a few live in perpetual joy and glory, while the mass is destined to an infinite life of torture and pain; this is only a crude, selfish and primitive barbarism, the belief in which burdens the life with fear and unhappiness. It is not christain, for Jesus was the most human, ideal and loving philosopher that ever labored for the good of man. Such a cruel and horrible idea was as foreign to his being, as that he loved pain and misery more than love and happiness.

We find that the physical world we know with its system of related and creative work from the atom to man is the world system of ever present world equilibrium with its limits of tolerance. That, indeed, if the world was not an equilibrium with its system of creative work the world would not be a system, for we cannot even conceive the thought of the world system as possible outside the ever present system of the world equilibrium, and as our idea of the world is an ever present system of related equilibrium in the world equilibrium, the world equilibrium is and must be the world idea with its system of creative and constructive work. With this conception the relation between the world of physics and the world of psychics at once receives a definite and concrete form, for the ever present world equilibrium is the ever present unity of the world idea with its system of work. It is not the system of variation and relation from atom to man in the world's work that is the world idea, but its ever present system, unity of equilibrium.

(To be continued.)

DISCUSSIONS.

This Department contains each month case reports, letters, inquiries and replies from our readers. If you have a case you would like some help with, or a question to ask, write to us and we will publish it in this Department and you will get the opinions of our medical brethren. When you have an interesting case, write a report of it and send it in and it will help some one else. We need each other's counsel so let us help each other from our experiences. Letters are desired from physicians on any subject pertaining to our profession.

A CASE OF CHOREA.

In private practive a physician runs into a number of cases of chorea during the years which give him some annoyance, and worriment to the patient's family. Lately I have had a case of chorea, in a young girl aged fourteen, white. Family history gives no account of its being hereditary and no history of rheumatism. The girl's health has always been good. She first noticed about five weeks ago a jerking movement of her arm, this finally extending to her lower limb. The speed became unintelligible, she had a staggering and reeling gait and became very nervous, with sudden outbursts of temper, complained of headache, heart was irritable and she was quite anemic.

In about a week rheumatism set in. This first attacked the shoulder joint and then the knee joint, which became very red, inflamed, swollen and painful. When she had these jerking movements it greatly increased the pain and she would cry out with the intense pain. The family give no history of rheumatism.

Great care should be taken with the hygienic part of treatment as this is an important feature. All nerve strain should be removed. The food should be light and wholesome, plenty of fruit and fresh vegetables.

Medicinal Treatment. At first I tried the bromides with but small results. I then put her on liquid potassium arsenate m.iij; increase a drop a day to tolerance, which in this case was eleven. To this I added fluid extract of cimicifuga m.xx. This was given three times a day. I also gave iron in the form of Blaud pills three times a day for the anemic condition, and also gave K_4, which seems to act well when you have rheumatism complicating.

At the end of three weeks she showed marked improvement and at the end of five weeks she was convalescing finely. E. L. WARD, M. D.

Starrucca, Pa.

HARD WORK.

Hard work has its pathological side. The man who "bucks" sacks of wheat during harvest time may wonder what is the matter with his wind. Tobacco adds to his trouble. If he can be made to live upon an improved hygiene and take more or less of the rest treatment he will improve.

Then there is the coal miner. Shaft No. 7 takes fire. Men work wildly all night to save lives. It may be at 5,000 feet altitude. Soon limbs swell, valves are limp, the face swells. We must send him to low altitude or he will perhaps die, or laying off for some months he may be able then to do a light day's work.

Mrs. S. has worked out of doors, milked cows, reared children, lifted tubs, "caught cold," committed abortions on herself with drugs and knitting needles, and at 40 years her feet swell, her back aches (she has had malaria), she urinates little and frequently. She has nephritis. She must call a halt or die soon.

In this day of active competition and reckless eating and drinking hearts and kidneys are knocked out in ways like the above. What must we do? Our first duty is to explain

these things to the patient. We can give medicines but if he or she does not rest medicines are but placebos or little more,

We meet with the replies constantly: "I must work." "I can not rest." Then a little positiveness, a little knack of saying things impressively and to the point is useful. Many a life is and may be saved if we can now convince our patient that he must make such and such alterations in his habits of life in order to live long and preserve his strength.

In my first years of practice I more often failed in my attempt to impress hygienic requirements upon my patients.

We should not say "do thus and thou shalt surely die", but rather should we say do thus and you will never be the man you were before; you will injure yourself past recovery, and years to come will prove the prophesy. Be impressive. Be positive and so speak that if your patient lives, not following your advice, that by the scars remaining you can prove to him you spoke wisely.

C. E. Boynton, B. S., M. D.
Smithfield, Utah.

CONCORDIA DISCORS—DISCORDANT HARMONY.

Members of the legal profession are entitled to the bar of another state through an introduction to the presiding judge, who then and there passes upon their credentials.

A commissioned surgeon or a physician of the federal government is in professional standing anywhere, at home or beyond the seas, and entitled to practice under the laws of the United States. The civil practitioner, who is also presumed to be a citizen of the United States, is not always so privileged. But there must be a reason for this:

"Full faith and credit shall be given in each state to the public acts, records and judicial proceedings of every other state." (Const. Art. iv, Sec. 1, Par. 1.) The state laws regulating the practice of medicine are so different in the different states, that in many, the privilege of practicing, to one changing his state would be denied without retrograding to the status of an undergraduate and passing an examination to qualify.

The details of anatomy, physiology and chemistry, the data of forensic medicine, texicology and laboratory research, the minutiae of capital surgery, etc., are subjects for reference, to prepare for which, the practitioner accumulates a library and indexes the tomes on his shelves for consultation. No practitioner carries his talents at his wit's end in dealing with human life, but prepares his diagnosis and treatment as a weighty opinion, or the details of any momentous action are formulated by logical method and research.

"The citizens of each state shall be entitled to all privileges and immunities of citizens of the several states." (Const., Art. iv, Sec. 1, Par. 2.) Now it is fair to say, that if an authorized doctor of medicine going to another state with a diploma from a recognized college, should register at the county or parish court, he would fulfill every requirement of the law. With such credentials, the authorities would be unconstitutional in refusing and liable, it seems. One impediment is the inability of the county clerk to recognize a good form of bogus diploma, which thus makes it often necessary to refer the matter to the state board of health. Constitutionally there is no provision made for this exchange. "No state shall enter into a agreement or compact with another state." (Const., Art. 1, Sec. 10, Par. 2.)

Why are the laws conferring upon medical colleges the right to issue

diplomas, placed within the jurisdiction of the police powers of the state? No health board is constituted a police board to discredit the qualfication of the college diploma. The state of Kentucky authorizes one officer as a police magistrate only.

The remedy, to the writer, appears to be possible in one of two measures, viz.:

By common consent, of an agreement effecting the system of exchange, through the channels of the state's board of health of state certificates. This might be secured by the joint action of the state's medical society.

Another plan, the fond dream of the civil practitioner, is the degree M. D. U. S.

This could probably only be attained by an amendment of the constitution of the various states, by adding thereto a section, accepting a license to be conferred by a national board of examiners or health, the same to be constitutional authority in any of the states, territories or insular possessions of the Union. This possibly would fall within the jurisdiction of the American congress of medicine in joint action with the national board of examiners, representing a conference of states. And congress may, by general laws, prescribe the manner in which such acts, records and proceedings shall be proved, and the effect thereof. (Const., Art. iv, Sec. 1, Par. 1.) The subject has been canvassed and exploited and has suffered always defeat; it has been laid upon the table awaiting some more convenient time and different method of organized procedure.

F. Silsby Tripp, M. D.

Pleasant Hill, Ky.

Good advice to patients—always keep your shoulder blades close together.

OVER EDUCATING.

Higher education is becoming a fad. Schools ambitious to graduate large classes are putting nearly anything in skirts or pants through the course. Two thousand dollar educations can now be saddled upon brains that are almost devoid of gray matter, with the result that the clod-hopper that might have been useful as a clod-hopper, becomes a useless monstrosity with his "education". Some of these half baked specimens of youth begin to roll it high and in years to come it proves that the college graduate is a cow puncher or sheep herder that goes on a monthly drunk. In the cities he perhaps tends bar or works with the street cleaning outfit, drinking up all he makes. When times are hard he goes upon the road. Indeed, his "education" unfits him for a laborer. Grim want may drive him to work, while he is sore over the way the world has wronged him. He is, of course, among the calamity howlers, the malcontents, and if brainy enough, he may even become an agitator.

Even the medical profession gets its quota of educated clod-hoppers. The writer remembers a classmate at an eastern medical college who in the freshman year failed in all his studies. This man possessed ample impudence and brass. He even tried to prescribe for patients while flunking flat at every freshman examination. This man would locate the circle of Willis in the abdomen and the fallopian tubes in the petrous portion of the temporal bone. He wended his way westward from Syracuse University, where they have no use for such students, and before the writer graduated this clod-hopper had a diploma from a "respectable" medical college, and what is more, he practices medicine and makes money. Never in twenty years could this man gain education enough to doctor cattle, much less men. He lacked the native

brain. I know a young college student whose vocal gush suggests a sick stomach to every man of common sense, yet as he bleeds his hard worktng father for money his professors laugh at him in secret, yet let him pass. His college is ambitious to make a large class roll and the professors who would drive students away might lose their jobs.

I know groveling human animals with prognathus pouches that gabble about art and attend college. They remind one of pine furniture with an oak finish. Turned out into the world with educations they are as a shoddy garment; they are polished imitations and represent a sad waste of crude materials.

In picking up every Tom, Dick and Harry, educating him and thus spoiling a useful clod-hopper, is using education as a destructive agent. By this process degrees and diplomas are fast becoming worthless or worse than worthless.

But some one will say, I advocate industrial education. That is well enough if the tasks taught are not disproportionate to the student. It is not sensible that every high school graduate dreams of becoming president or every boy at the industrial school nurse the ambition to become a subway contractor. Many a "college education" is entered upon just to fool the old folks to putting up the money to enable a young profligate to have a "respectable" period of debauchery, and I know an old couple who this day have not had enough proper food to eat because they are paying the way of a worthless boy through college. This old couple may be wards of charity while their son treats them with contempt, spending the last dollars for which the old farm sold for a box at the opera for himself and girl.

Had this young man remained at home upon the farm his parents in old age would have been insured a home. The youth would not now be above every job that he is able to do well. He would have been an adder to the world's increment but now he will be only a consumer, a bad example and a destroyer.

C. E. Boynton, B. S., M. D.
Smithfield, Utah.

WORTH REMEMBERING.

An application of a solution of sodium bicarbonate to the tonsils before suppuration comes gives good results in quinsy.

A good application for wounds is made as follows: Add all the camphor to carbolic acid it will dissolve in twenty-four hours.

Lemon juice is an excellent remedy for sun burn, follicular tonsillitis, rhus poison, eczema of the legs, felons, sour stomach and vomiting of pregnancy.

When in need of an application that will "draw" make a thick paste of salt and the yellow of an egg. It will almost draw a man out of his boots.

A sure cure for the itch is made as follows: Take bicarbonate of sodium, add enough water to make a thick paste, rub all over the patient and in a few days, with a few applications, the patient will be well.

When a patient needs the colon flushed, which is very often the case in both chronic and acute diseases, and a matter which should not be overlooked, let them get on their knees with the pelvis way up in the air, then insert the nozzle and when the patient is full tell them to lie on the left side and retain the water as long as they can. J. A. Burnett, M. D.
Little Rock, Ark.

The Wisconsin Medical Recorder.

A Monthly Journal of Medicine and Surgery, devoted to the best interests of the whole profession.

J. P. THORNE, M. D., Editor and Publisher, Janesville, Wis.

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Letters, Case Reports and **Questions** are desired for our Discussion Department.

Society news and reports and items of interest are gladly received.

Vol. 6. DECEMBER, 1903. No. 12.

The many original features peculiar to the Recorder make it a valuable journal to bind. We make a special proposition for binding the Recorder. If you send us your numbers for the past year with 65 cents we will return you the bound volume prepaid. We do not pay express charges on any binding except the Recorder. The year's numbers make a handsome volume, as we bind them in leather and cloth with gold lettering on the back. We have a few extra copies of some issues. Whenever numbers are missing we will, when binding the volume, supply them without charge. The unbound copies can be sent by mail at the rate of four cents per pound. If you bind your Recorders we are sure you will have frequent occason to use the volume for reference.

This number marks the completion of the sixth year of continuous publication of the Recorder. Prosperity continues to favor the Recorder in all departments, so that it is one of the successful medical publications. It has been our intention to improve the Recorder each year and we feel that the year just closed is no exception to the rule. The volume consists of original matter of such variety and value as to be of use to all practitioners. The articles which we have already arranged for, assure that the 1904 volume will be unusually good. We wish our thousands of readers many pleasant returns of the season, for whom we hope to have the pleasure of editing the Recorder for many years to come.

The articles which have been appearing in the Recorder by Dr. Chas. C. Miller, of Chicago, have been greatly enjoyed by our readers. Dr. Miller will have an article on practical surgery each month. Dr. Miller's article in the January number will be "Ingrown Toe Nail", with illustrations.

Dr. Thomas H. Manley, professor of surgery New York School of Clinical Medicine, surgeon to Harlem and Metropolitan Hospitals, etc., will contribute a valuable article on surgery each month.

Our supply of back numbers of some issues of the Recorder is entirely exhausted. We have many requests for back numbers which we cannot supply.

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THE DOCTORS' WORLD.

Therapeutic Briefs, Medical News Items, and Clinical Notes on Medicine and Surgery.

Argyrol.—This is one of the new silver salts which is being used by many practitioners. Coblentz in the Therapeutic Gazette reports his opinion of it, which is given in the abstract below.

This is another organic compound of silver, known also as silver vitellin and contains 30 per cent. of the metal. It is readily soluble in hot water and is not precipitated by albumin or sodium chloride. It is claimed for this preparation that on account of its large percentage of silver and high penetrating power it is more actively germicidal than the earlier organic compounds, but clinical data do not indicate any shortening of the duration of the disease, and in the treatment of gonorrheal urethritis complications have occurred and owing to the fact that the drug frequently dries up the secretions which by giving a false sense of security to the patient results in recurrence of the discharge and consequent involvement of the posterior urethra. Further objections to the substance are found in the high cost of the preparation and in the fact that it possesses a disagreeable staining effect.

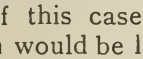
Malpractice.—Every physician, no matter how large or how small his practice, is in constant danger of unjust suits of malpractice. The most skilled and eminent of the profession are annoyed by these suits. Malpractice suits seldom have any just basis but are blackmailing or moneymaking schemes. Physicians, as a rule, give their patients their best work. The way to prevent malpractice suits, and to meet them if they occur, is to have a contract with the Physicians' Defense Co., of Fort Wayne, Ind. This company does not pay judgments but spends its money, to the extent of $5000.00 on any one case, if necessary, in providing defense. Defense and vindication of reputation are what the doctor wants. Many of the best men in the profession are enthusiastic supporters of the methods of this company. Dr. Chas. A. L. Reed, of Cincinnati, ex-president of the American Medical Association, writes to the company:

Messrs. Wilson & Wilson, your attorneys, in the case of Hutchinson, Admr. vs. Reed, have advised me that the case has been dismissed for want of prosecution and at the instance and at the expense of the plaintiff. This very satisfactory termination of a very disagreeable incident affords me the opportunity, which I very gladly embrace, to testify to the promptness, faithfulness and the fidelity with which you have protected my interests.

When the case was instituted you immediately took the entire matter off my hands, employing my own attorneys, whom I recognize as among the ablest at the Cincinnati bar, and from that time to the present, I have been spared every unnecessary annoyance of the successful defense of a case out of court. Your attorneys left no stone unturned, having investigated the character of the plaintiff, his professional standing, his social relations and his own connection, personal and professional, with the case. The depositions taken at the instance of the

plaintiff, were so skilfully managed by your attorneys that when submitted to the distinguished local counsel for the plaintiff, the latter was prompted to advise the dismissal of the proceedings.

I feel that if all malpractice proceedings could be defended by you and with the extreme skill manifested in the conduct of this case, members of the profession would be less frequently subjected to the disastrous annoyance of newspaper publicity incident to sensational trials. I cannot too heartily commend your enterprise to every member of the medical profession.



Chronic Deafness.—The treatment of deafness due to pathological tympanic conditions is much more satisfactory now than a few years ago on account of the apparatus used. A large per cent. of these cases are decidedly benefited by vibratory massage, the application of dry heat of high degree with such an appliance as the Terry heater, Eustachian catheterization and inflation and medication of the middle ear, the use of the nebulizer and proper treatment to nose and throat. One fact which should be impressed on patients is that in many cases the onward progress of the disease is stopped if the actual hearing does not improve, and this is worth much to the patient. In treating these cases it must be plainly stated to the patient that the gain is very gradual and that a long series of treatments is usually necessary. Sometimes the gain is so gradual that the patient is not fully aware of the improvement. We have had patients say after a number of treatments that they guessed that they were not any better. Upon closely questioning them about certain sounds they would admit of gain, and a test with watch showed a gain of six to twelve inches. Dr. P. D. Kerrison, of New York, contributes an excellent article on this subject to the Medical Record. Regarding classification and prognosis he says:

The large majority of cases of chronic deafness are of tympanic origin, and may be considered under the following heads:

1. Chronic tubal catarrh, in which there is marked narrowing, or actual stenosis of the Eustachian tubes.

2. Chronic hypertrophic catarrh of the middle ear, in which the tympanic mucosa, and all the joint structures of the ossicular chain may be involved.

3. Suppurative processes within the middle ear resulting in partial or complete destruction of the drum membrane, malleus and incus.

4. Chronic hyperplastic otitis, also spoken of as "dry catarrh," or sclerosis of the middle ear.

What can be done for the relief of chronic deafness? In considering this question, the writer is not a pessimist. He believes:

1. That there are certain cases of advanced catarrhal deafness—even among those in which no evidence of serious labyrinthine involvement can be found—which do not respond to treatment.

2. That in the large majority of cases the power of audition can be distinctly improved.

3. That in the early stages of catarrhal, or tympanic, deafness the majority of cases are susceptible of practical and complete cure.

4. That in advanced stages of catarrhal deafness rational treatment often results in an improvement, which adds greatly to the patient's enjoyment of life, though the normal hearing power may never be regained.

5. That where but slight improvement of hearing is accomplished, the result of treatment is often of value to the patient in arresting a process which might otherwise lead to very marked or total deafness.

Rundschau.

By H. Speier, M. D., Rochester, Minn.

ON ULCER OF THE STOMACH.

With better knowledge of diseases of the digestive organs, based on systematic modern study of the mechanism, chemistry and physiology of digestion, we have gained greater insight into the etiology, mode of development, character and life history of gastric ulcer and learned that it is far more frequent than formerly thought. With all the more exact knowledge there are doubtful points yet to be cleared up, chief among them the diagnostic difference between ulcer and cancer of the stomach. There are certain features commonly enumerated and on which a good deal of dependence can be placed. What might be termed the classical triad, pain, vomiting and hemorrhage, are the leading signs of ulcer. Pain severe, worse after meals, relieved by vomiting, vomiting soon after a meal, the blood vomited commonly bright red and profuse. In cancer the pain is less acute, but constant, vomiting comes on once or twice a day, not in connection with meals, amount of blood vomited usually small, its appearance that of coffee ground. Add to this the difference in age, ulcer being more common between 20 and 30, while cancer is a disease of advanced age, 50 to 60, and the fact that ulcer occurs twice as frequently in women than men, and we seem to have sufficient data for differential diagnosis.

But modern pathology teaches that cancer may and often does develop from an old ulcer. It is in the transition period in which a positive diagnosis cannot be made.

Medical treatment has never been very successful. All it can possibly accomplish, is to favor quick healing of the ulcer and promote cicatrization. It is hard to see. how drugs can help towards that end. The only rational mode is to give to the stomach functional rest. The use of the stomach pump is conceded to be fraught with danger and is permissible, with caution, only for the purpose of removing undigested food. The giving of food and even drink by mouth should be entirely stopped for a period of two weeks, recourse being taken to nutrient enemata only. It is the same procedure which has proven itself. valuable in acute appendicitis. If it is strictly carried out, there will be no need for the giving of ant-acid remedies, for no work being performed by the stomach, the secretion of gastric juice is held in abeyance. Every ingestion into the stomach excites its activity and thus iuterferes with the object of the treatment.

After subsidence of acute symptoms and cicatrization, what then? Operation, a gastro-enterostomy. The old cicatrix is the favorite starting place for cancer. Remove all irritation from it by opening a new passage for food. In cases, where no exact diagnosis can be made, and they are numerous, give the patient the benefit of the doubt. Dr. W. J. Mayo, admittedly an authority on the subject, says emphatically, that the period of doubt is the time for operation, for after the tumor, the indisputable symptom of cancer, can be felt, the patient's chances are poor under any form of treatment, medical or surgical.

A NUISANCE.

On succeeding pages of a late number of the Courier of Medicine may be

read the following designations; Kernig's sign, Auenbrugger's sign, Babinski's reflex, Bacelli's sign, Bard's sign. Now, how many practitioners or even medical college professors know, without going to their dictionaries, what is meant by these names, possibly excepting the first? Surely, such designations convey no meaning. It is an absurdity to use such a nomenclature, instead of giving the necessary description of symptoms or pathological condition, which can usually be done in a few plain words. Little honor is conferred on a medical investigator by thus attaching his name to a "sign", because he was the first to describe it, while it is a troublesome encumbrance of scientific diction, which should be simple and clear. It is one of the foolish customs of a past age, to be discouraged by the medical profession of the present day. Medical journalism could and should render good service in the abolishing of the nuisance.

EXAMINATION OF TEETH IN SCHOOL.

The National Dental Association at its last meeting in Asheville, N. C., resolved that regular examinations of the teeth and mouths of children should take place in public schools. And why not? The recommendation is quite rational from the standpoint of public hygiene, for much disease may be propagated by disease located in the oral cavity. The state of a child's health is as much affected by his teeth and mouth, as by his eyes, and if it is considered within the domain of public supervision to examine the eyes, then it is certainly as much public duty to examine teeth. Now, what will come next?

SANITARY CLEANSING.

The National Public Health Association has recently called attention to the danger of disease dissemination through insanitary furnishings of railroad coaches. It is not at all an imaginary danger. Undoubtedly many a case of contagious disease, otherwise inexplicable, could be traced to an infection contracted during travel. The fittings of American railway carriages are very insanitary, the plush coverings of seats, the heavy hangings, blankets and pillows used in sleepers seem particularly designed to catch and retain disease germs. The cleaning they receive is for the most part only perfunctory and at its best hardly capable of removing infectious germs. It is work left necessarily to persons with inadequate conceptions of sanitary needs. Even among persons of higher intelligence, we physicians know, it is hard to meet with full understanding of such requirements. The insanitary condition of our railway coaches has often been unfavorably commented upon by European travelers, for European authorities exercise far more effective supervision.

An improvement easily carried out would be the replacing of the plush coverings of seats, seldom comfortable and at all times objectionable for the dust and dirt they gather, by an upholstering material, leather or cane, which can be treated to a scrubbing with soap and water. Sweeping and dusting should no longer be done in the ordinary way, which merely raises up the germladen dust and allows it to settle on other places. Instead there should be used an apparatus, described and illustrated in the Scientific American of October 24, applying condensed air and removing dust and dirt more quickly, completely and safely, than can be done by any other means. The method is in use on some railroads and a similar form of it on the steamers of the Cunard line and gives good satisfaction. It should be introduced universally for the cleansing of public conveyances. It ought to be an object for regulation by federal or interstate legislation.

CLINICAL SOCIETY PAPERS

Alopecia Areata, By Dr. F. H. Dillingham.
Two Cases of Skin Disease, By Dr. Victor C. Pedersen.

CLINICAL SOCIETY OF THE NEW YORK POLYCLINIC MEDICAL SCHOOL AND HOSPITAL.

Regular meeting, with the president, Dr. James Hawley Burtenshaw, in the chair.

The paper of the evening was read by Dr. F. H. Dillingham, and was entitled

ALOPECIA AREATA,

and was, in part, as follows:

"Alopecia areata should only be used to designate a disease where the hair falls out in one or more patches which increase in size by spreading at the periphery and leave a bald area without any apparent inflammation of the skin. In a majority of cases the disease is confined to the scalp, and after the hair stops falling out the patch may remain stationary or new hairs, which are usually at first fine lanugo hairs, appear at the margin or in the patch. While the disease is progressing the hair at the margin is loose, with atrophied roots and can be easily pulled out. The skin shows no signs of inflammation, is smooth, shiney and slightly depressed. There has been a great difference of opinion as to the etiology, some claiming it to be a trophoneurosis and others perantic. There is no question but what there are a number of cases of alopecia occurring as the result of a shock or injury to a nerve, but they do not have the definite clinical history that we have in alopecia areata and should not be called such, but designated as alopecia neurotria. Simply because an area is devoid of hair it should not be called alopecia areata.

The manner of spreading at the periphery, the inflammatory process in the coricum, the fact that the loss of hair does not follow a nerve distribution and the number of epidemics reported seem to be conclusive evidence that the disease is parasitic and slightly contagious under favorable conditions. Although a number of different organisms have been found, none of these have been proven to be the cause of the disease.

Salourand claims it is the same bacillus found in seborrhoea but it is also present in comedones of acne. He also claims that it only occurs after puberty, which does not explain the many cases in children. Crocker and Hutchinson believe it to be related to ringworm, but there is no proof.

The disease which will give the most trouble in diagnosis is ringworm of the scalp, in which the patch is inflamed, the baldness is not complete, and there are the characteristic, short, broken-off hairs, with short ends. In doubtful cases the microscope will decide.

In favus, the yellowish crusts, incomplete baldness, inflammatory symptoms and atrophy will enable one to make a diagnosis. The prognosis is almost always good if the disease has not lasted long enough to destroy the hair follicles. If acne had been properly treated for two months and there are no lanugo hairs, the chances are the hair follicles have been destroyed and there will be permanent alopecia. If there is any defective treatment of the general health, it should be corrected, but aside from this, internal

treatment is useless. Besides a large number of drugs, Roentgen rays, Finsen light and radium have been used.

Chrysarobin will give the best results in most of the cases, but it should not be used on the face or over too large a surface at one time. It is best used with vaseline, 25 grains to the ounce, and it is well not to use too strong a preparation at first. We aim to produce a mild dermatitis in order to obtain the benefit of the emigration of the white blood corpuscles and destruction of the organism. The preparation should be thoroughly rubbed in with considerable friction every night for a week and then discontinued to see if the disease is still progressing. After the alopecia has stopped spreading, stimulating applications with massage should be used to bring an increased blood supply to the part and aid in nutrition of the new hair.

TWO CASES OF SKIN DISEASE.

Dr. Victor C. Pedersen presented two interesting cases of skin disease, one of scaling papulo-squamous syphilide, some of the lesions of which resembled psoriasis; and the other of generalized numular psoriasis, strongly suggesting syphilis at first sight. The histories of the patients were as follows:

Case 1.—Male, 22 years old. Eight months ago had a chancre, which left behind the typical indurated scar on the prepuce. Nearly three months afterward a rash appeared on the skin and the man consulted a physician, who prescribed antisyphilitic remedies, which were taken in an irregular manner for a short time, resulting in a more or less complete disappearance of the rash. About three weeks prior to his appearance at the New York Hospital, about the middle of October, the outbreak returned with greater virulence and wider dissemination. When first seen at the New York Hospital he presented a generalized papulo-squamous scaling rash all over the body. Some of the lesions, especially near the elbows and shoulders, were so large and the scales so numerous as to strongly suggest psoriasis. Differential diagnosis was made by the presence of typical mucous patches in the mouth and typical lesions of syphilis on the palms of both hands and soles of both feet. Tonics, mercurial inunctions and ascending doses of the iodide of potash in about three weeks caused practically all of the small lesions to disappear and only the large ones remained. The character of these larger lesions was somewhat suggestive of psoriasis, and the case was presented for its interest and for differentiation by the members of the society between these two diseases.

Case 2.—Male, 24 years old. About five weeks before he applied for admission to the New York Hospital Out-Patient Department, a generalized scaling rash appeared all over his body. In this case the lesions were frankly those of psoriasis, but resembled those of syphilis somewhat in being comparatively small and in being scattered everywhere over the body excepting on the soles and palms. The diagnosis was made through the absence of sole or palm lesions and of lesions in the mouth, and likewise by the distinctly psoriatic condition of the backs of the hands. Three weeks of treatment had caused the scaling to practically disappear, and the color of the underlying skin had assumed a much more healthy appearance. The treatment had been simple, consisting in simple diet and regular physical exercise and ascending doses of Fowler's solution of arsenic, with chrysarobin ointment, about 10 per cent. applied to small areas of the body in turn, from night to night, and 10 per cent. boric acid ointment, applied to other parts of the skin to keep the scales as soft as possible.

MEDICAL RHYMES

ODE TO JENNER AND PASTEUR.

By Jno. J. Caldwell, M. D., Summit, N. J.

(Continued from page 397, November Recorder.)

V.

Then, in the steps of Jenner, came Pasteur;
  As McIntosh in Newton's; he,
  Not satisfied with facts alone, would be
  Familiar with their theory,
And of their inmost meaning sure
Into the hidden world; where live
All things, the most diminutive,
Where all material causes dwell
In secret, and invisible;
His daring way to ope,
He wields his sword, the microscope,
And wins his way beyond unaided sight.
By Roentgen's X-ray's electric light,
Nature's inmost secrets were disclosed,
And to his earnest gaze exposed,
The slightest movements in earth and air,
And the minutest things abiding there.
The brave Pasteur!
  How must his heart have thrilled
When a voyageur
  In regions new, with beauteous wonders filled.
    Surpassing all before,
    In real life or fairy lore!
Sinbad the Sailor in the vale of gems,
  And Alladin in the magicians cave;
Where crowded on the mystic forests stem
  Were treasures of the land and wave.
    Diamonds, and rubies, sapphires, emeralds, pearls,
    Brighter than ever sparkled in the curls
    That ever graced the brow of Orient girls,
Or shone on monarchs' diadems;
Never such precious, priceless wonders saw,
As great Pasteur beheld with awe;
Yet with a calm and steadfast mind
Fixed on his aim—a blessing to mankind—
With more than the magician's ease,
  He summoned chemistry and its kindred arts.

Slaves of the lamp of science these,
  Analyzed Small-Pox e'en in all its parts,
Tracing its death-drops to their hidden rills,
    Exposing, too, a nest
Of other vile contagious ills,
Diphtheria; Pneumonia; stern Typhoid;
Malaria also; but I avoid—
    Too numerous are they to proclaim the rest.
All these he conquered—the majestic soul—
And held them under his benign control.
And in his search for these
He drove the harpies of disease
From many loathsome feasts,
On health of harmless birds and beasts,
And—great discoverer!
We from his teachings may infer,
That, 'mid researches in the realms of mind,
And 'mid unyielding strife
Against disease's might,
Oft smiled on him—his guide afar the light
Of the eternal Sun of universal life.

VI.

The great germ theory which Pasteur proved
To be a bright and lovely truth, hath moved
  Science in all departments, for it shows
    That there is life in all, the smallest things,
  And many a lofty intellect now glows
Along the path of progress for a place
Among the foremost in the world's race
    And mind, unfolding for its wings,
Flies o're lands and seas
For new discoveries.
And medicine, till lately laggard, stands
Brightest among the foremost bands
On Science's proud stage,
In the full sun-burst of the wondrous age.
    Yet, while her records shall endure,
Though many a great and glorious name
Be added to her lists cf fame.
Upon that scroll sublime
None shall shine brighter through all time
    Than shine the fames of Jenner and Pasteur.

EPILOGUE.

Oh! if the law that governs every land
  Enforced the rule that genius holds as right,
The work of Jenner and Pasteur would stand
  In all its majesty and all its might.

What forms now doomed to death would live,
What rest would mind and heart receive;
No longer terror and despair
Would darken like the clouds, the air;
Nor life be fearful lest the breath
Which health requires, should teem with death.
Diseases, like mad serpents, foes to joy,
With their own poisons would themselves destroy;
And foul contagion haste to hide its head,
Where it arose, in fell Gehennai's shade.
Then would each lovely Christian Grace,
Faith, Hope and Charity, embrace
The arts and sciences, and all unite,
With holy thoughts and feelings pure,
To sing their songs of love and light
In praise of Jenner and Pasteur.

THE WAVE.

By C. E. Boynton, B. S., M. D., Smithfield, Utah.

Equidistant particles
Like beads upon a string,
Upon a plain of motion gain
Each moving in a ring,
Should phases run in unison
And circuits all agree
Together all would rise and fall
In dull monotony.
But every phase behind the next
An equal space of swing
Would bend straight lines in curves of lines
Like some vibrating string.
Still every phase behind the next,
As round and round they go,
That highest one has just begun
To take its turn below.
From point to point we see the crest
Advance before the eye;
'Tis but a form that's moving on
A wave that's passing by.
A wave! A wave! The vibrant string
All ether's undulation,
The billows' bound, light, heat and sound,
Tell of its propagation.

THE DOCTORS' LIBRARY

This Department contains each month reviews of the latest and best books. Items of book news will keep readers informed on progress in the world of medical literaure.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS.—Under the General Editoral Charge of Gustavus P. Head, M. D. Volume X, Skin and Venereal Diseases, Nervous and Mental Diseases, Edited by W. L. Baum, M. D. Pages 236. Illustrated. Price, Cloth, $1.25. The Year Book Publishers, 40 Dearborn St., Chicago.

Dr. Baum presents a year's progress in skin and venereal diseases in a way to be appreciated by the general practitioner. The latest therapy and many valuable formulae are given. One chapter is devoted to actinotherapy and radiotherapy. Abstracts of recent literature on venereal diseases occupy several chapters.

Dr. Patrick, with the collaboration of Dr. Chas I. Mix, gives the latest in nervous and mental diseases. The abstracts on recent literature and the editorial notes will be found helpful by all practitioners. The volume contains a number of good illustrations. This volume completes the second series of this publication. The first volume of the third series is now ready for delivery. This series of books consists of ten volumes, one being issued each month. The series has been published at $7.50 for the set. We have considered this a very low price but the publishers announce that the third series will be furnished for $6.00 or for $5.50 if cash is sent in advance. This is certainly a remarkably low price for this set of books. The books are well bound in cloth, are well printed and are edited by able members of the profession.

A MANUAL OF BACTERIOLOGY.—By Herbert U. Williams, M. D., Professor of Pathology and Bacteriology, Medical Department, University of Buffalo. Pages 351, with Ninety-Nine Illustrations. Third Edition, Revised and Enlarged. Price, Cloth, $1.75 net. P. Blakiston's Son & Co., Philadelphia.

Works on bacteriology are a necessity to both medical students and practitioners today. That this book has supplied a need is evidenced by the fact that two editions have been entirely exhausted in a few years. In this edition the author gives a historical sketch which is very interesting. One chapter is devoted to an excellent discussion of immunity. Dr. Thomas B. Carpenter contributes a chapter on disinfectants and antiseptics, which is of practical value. Dr. Marshall Clinton furnishes a chapter on the preparation of instruments, ligatures, dressings, etc., for surgical purposes. The book is a good working guide on bacteriology and is one which the general practitioner will find very useful. An up-to-date work of this kind should be in every doctor's library. The illustrations are nearly all new and are all good.

THE ACID AUTOINTOXICATIONS.—By Prof. Dr. Carl von Noorden, Physician-in-Chief to the City Hospital, Frankfort, a. M. Authorized American Edition. Translated Under the Direction of Boardman Reed, M. D. Pages 80. Cloth. 50 Cents. E. B. Treat & Co., New York.

Those who have read the other volumes in this series of clinical treatises on the pathology, and therapy of disorders of metabolism and nutrition, will welcome this volume. Physicians who treat chronic diseases successfully must always keep a close

watch upon the digestion, excretion and assimilation of their patients. Autointoxication is a perversion of metabolism which it is very necessary to recognize and to remedy if possible. The acid form of autointoxication is one of the gravest and a consideration of it is of great practical importance. In this little book von Noorden discusses the subject in a manner which will be appreciated by the practical reader. One chapter is devoted to therapeutic conditions and gives methods of combating this form of autointoxication. The book is both instructive and helpful.

BOOK NOTES.

The Household-Ledger for December is a Christmas fiction number. It contains a great wealth of Christmas stories, "Concerning Celebrities of Today," by Fannie M. Lothrop, gives portraits and biographical sketches of nine eminent people of the time. Published at 95 Liberty St., New York.

The Physician's Visiting List for 1904, has been issued. This is the fifty-third year of the publication of this physician's list, so it must be popular with the physicians. In addition to record of visits, the book contains chapters on Incompatibility, Poisoning, Asphyxia and Apnea, Dose Table and other valuable tables. It is a compact and simple record book. The book is substantially bound in leather, arranged for 25 patients per day or week at $1.00; for 50 patients, $1.25. It is published by P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia.

The December McClure's contains Christmas stories and pictures galore. Among the articles are Miss Tarbell's resumation of her tranquil and damning expose of Standard Oil moral turpitude; and Ray Stannard Baker's "Lone Fighter", a true story of men and fight for honesty and cleanliness against the active ill-will of the dishonest and corrupt and the passive skepticism of the "good citizen". La Farge begins his series on a "Hundred Masterpieces of Painting", by a special article on "Portraits of Civic Life"; and Clara Morris has a scintillating chat about Ellen Terry and Mrs. John Drew.

The Christmas Everybody's Magazine is an excellent issue of this progressive magazine. A few of the articles are a "A Painter of Bible Scenes", by Christian Brinton, with beautiful reproductions of some of Burnands' best pictures; "The World's Babies" by Marian West, with many illustrations; "When Slav Meets Jap," by O. K. Davis, who was the New York Sun's war correspondent in China and the Philippines; "Concord, the Historic," by Alfred H. Lewis. "Intimate Portraits" are fine half-tones of men and women who are doing interesting things. The fiction is good and the editorial departments are spicy as ever.

We have received the 1904 editon of the Physician's Pocket Account Book, by Dr. J. J. Taylor, published by The Medical Council, 4105 Walnut St., Philadelphia. It is a neat, compact, easily kept and strictly legal book, carried in the pocket, always with you, showing each person's account at a glance. All entries are made but once, on the day when the the services are rendered, in plain legal language, and require no posting or further attention. The book contains obstetric, vaccination and death records and cash accounts. The book is 4¼x6¼ inches, containing over 200 pages. Price, bound in leather, $1.00.

"Manual of Physiological Cell Medication," is the title of a little book just issued by Dr. John Aulde, Kennett Square, Pa. The first section of the book is devoted to "Physiological Cell Medicaments", giving their materia medica and therapeutics. The second section is the "Therapeutic Index". The various diseases are arranged alphabetically and their treatment by cell medicaments given. Then come the "Therapeutic Guide" and "Summary of Indications", arranged in tabular form. The book contains seventy-two pages and is neatly bound in paper. A copy can be obtained free of charge by applying to the author, and it is well worth sending far.

December "Success" (Christmas issue) contains the latest poem by James Whitcomb Riley, "It's 'Got' to Be." Vance Thompson contributes a somewhat startling article entitled, "Notable People I Have Interviewed," in which he tells of his experience as a journalist while trying to secure information from such great men as Zola, Dreyfus and Bismarck, and incidentally discloses hitherto unknown diplomatic secrets. "The Peasant Days of Pope Pius X," by Salvatore Cortesi, contains some remarkable stories of the pontiff's boyhood days. "Does the Higher Education of Women Tend to Happiness in Marriage," by Charlotte Perkins Tilman," explains itself.

The Christmas Metropolitan contains seventy-five pictures, many in color, twelve short stories and several strong articles. Stephen Bonsal, the well known traveler and correspondent, contributes the leading article, which is superbly illustrated in tint. In this article Mr. Bonsal describes with a vivid and sympathetic pen the return to Jerusalem of an aged Hebrew who goes to the Holy Land to die. Incidentally the conditions of today as they exist in the land of the Bible are graphically told. George Wharton Edwards, artist and author, contributes a short story, charmingly illustrated with color drawings by himself, which deals with Holland at Christmastide.

The Christmas number of Lippincott's Magazine is favored in becoming the medium for one of the most catchy novels of the season. Its title is "The Fascinating of Mr. Savage," and Helen Milecete is its author. The number also contains a great variety of short fiction, mostly Christmas stories. Christmas verse is also plenty. George Moore's "Avowals," a literary criticism of value, is continued in Part IV. In speaking of Tolstoy this critic says, "Tolstoy's extraordinarily intense intelligence is the cause of Tolstoy's folly, and the intelligence is extraordinarily intense because it is extraordinarily narrow." "Walnuts and Wine" are spicier than ever this month in honor of the season of Good Cheer.

In the December McClure's Magazine there is a strong, poignant drawing of John Rockefeller, the Standard Oil magnate whose methods are being so mercilessly revealed in the same publication. The picture is full of human interest. It is a profile, the profile of a hard old man, with a cunning, pointed chin, and a mouth closed tight like a leather pouch-purse. A skull cap covers the absolutely bald head, the cheeks are hard as parchment, the eyes deep-set. The ensemble is one almost incredibly hard and cunning, and yet from its contemplation it is not fear, or dislike that we feel as much as pity. In that visage there is no life, no blood, no merriment. It is a death-mask, a death-mask in whose rigid lines are congealed cold, cruel, calculating greed, and dread, dread, almost pitiful. There's a whole sermon in that one-page picture of George Varian.

MODERN THERAPEUTICS

Brief original communications and short abstracts giving the latest in therapeutics.

DELAYED UNION OF FEMUR.

By R. J. Morgan, M. D., Van Wert, Ohio.

Surgeon to Pennsylvania Lines between Chicago and Pittsburg, and Secretary to the Association of Railway Surgeons between Chicago and New York.

The following is especially of interest to our readers and users of the ambulatory pneumatic splint at this time owing to the approach of the season when fractures of the lower limbs are of frequent occurrance.

I fractured my left femur on the 17th of last June. Laid in bed thirteen weeks with delayed union. Finally united and remained so for about ten days when I again fell and refractured it. Am despondent and want to get out. Your splint occurred to me and from what testimonials I see, I think it is to be just what I want. Please send by express at once. Enclosed find check for $29.75. (Oct. 13, 1903).

I want to write you about the splint I purchased of you three or four weeks ago. I have used the splint on myself ever since and am convinced that it is the only dressing in the world to use on a broken limb, and I have made up my mind never to put a patient of mine in bed after this.

Had I used this splint in the beginning when I was hurt I would have been a well man today. I will always be an advocate of your splint and have demonstrated and convinced all the physicians in my home town that it is the only dressing.

When I was injured, which was on the 17th day of last June, there was not a healthier or a busier man in northwestern Ohio than myself. The confinement caused me to lose sixty pounds in weight, all the ambition was gone and no union of the bones. I cut off the plaster paris dressing which the attending physician had on, and myself and wife adjusted your splint. I got out of bed at once, started off on crutches, in eleven days my limb was united and have been gaining in health and strength ever since.

I have hundreds of friends, people who have watched my recovery with a great deal of anxiety, and I do believe that no one could induce them to have any other dressing put on their limbs in case they should meet with such an accident. Am quite certain you will be able to sell a number of splints here from this on.

Will read a paper on the use of this splint at the next meeting of the Associatlon of Railway Surgeons at St. Louis. (Nov. 5, 1903).

A SEVERE CASE.

By John F. Neal, M. D., Lytle, Tex.

I have the pleasure of telling a most remarkable experience had with the bottle of ecthol kindly forwarded me last month by Battle & Co. When I received the sample of ecthol I had been treating a young man about ten days for what I diagnosed as ulcer of the stomach. For a year before coming to me he had occasionally seen dark colored blood in his alvine discharges, and now and then he had vomited blood of a lighter hue. There was an indurated spot on the body of the stomach about twice the size of a silver dollar, which had been giving

him trouble for some time. Could trace no history of cancer in his family. After putting him on teaspoonful doses of ecthol four times a day, he came to my office and smilingly told me the hard spot was gone. I examined him and found it to be true. During the last week he had been on ecthol alone. The vomiting had also ceased and he had gained in bodily vigor. Gave him a second vial of same, cautioned him as to eating and exercise, and discharged him in fine spirits. I wonder if this case can be matched?

THE DECADENCE OF OPIUM.

We would not banish opium. Far from it. There are times when it becomes our refuge. But we would restrict it to its proper sphere. In the acute stage of most inflammations, and in the closing painful phases of some few chronic disorders, opium in galenic or alkaloidal derivatives, is our grandest remedy—our confidential friend. But here the application should cease; and it is just here that the synthetic products step in to claim their share in the domain of therapy. Among the latter perhaps none has met with so grateful a reception as antikamnia tablets, and justly so. Given a frontal-temporal-vertical or occipital neuralgia, it will almost invariably arrest the head-pain. In the terrific fronto-parietal neuralgia of glaucoma, or in rheumatic or post-operative iritis, they are of signal service, contributing much to the comfort of the patient. Their range of application is wide. They are of positive value in certain forms of dysmenorrhea; they have served well in the pleuritic pains of advancing pneumonia and in the arthralgias of acute rheumatism. They have been found to allay the lightning, lancinating pains of locomotor ataxia, but nowhere may they be employed with such confidence as in the neuralgias limited to the area of distribution of the fifth nerve. Here their action is almost specific, surpassing even the effect of aconite over this nerve.—National Medical Review.

THREATENED ABORTION AND MISCARRIAGE.

This constitutes one of the most valuable indications of Hayden's viburnum compound. Instead of narcotizing the patient like the opiates it arrests pain and checks hemorrhage in a far more efficient and agreeable manner. In view of the marked antispasmodic and anticongestive power of this preparation, its value will be readily appreciated in the treatment of these cases when employed in connection with perfect rest.

The dose at the beginning should be one dessertspoonful, followed by teaspoonful quantities when required. When, however, miscarriage has occurred or is inevitable, Hayden's viburnum compound is equally indicated for the control of the bleeding, the relief of the pain and the prevention of complications, such as inflammation of the uterus or appendages.

POSITIVE RESULTS.

As far as positive results are concerned it is safe to assert that no preparation of iron ever introduced to the medical profession has met the requirements to the extent that the pharmaceutical product, Gude's pepto-mangan, has done. Unlike many articles claiming to be "just the same," or "just as good," it has stood the test of years in the hands of the practitioner, and has been submitted to the severest clinical investigations by eminent men in the profession, both in hospital and private practice.—The Medical Examiner and Practitioner.

A GOOD WORK.

The Oppenheimer Institute is accomplishing a great work in curing liquor and drug habits.

The vice-president, some of the members of the executive committee, representatives of the board of directors and of the board of advisory directors of the Oppenheimer Institute recently attended a meeting called to organize a Women's Auxiliary and laid their plans before the ladies present. They said in part:

"We believe that science has placed in our hands an extremely successful treatment for alcoholic and drug disease. A thorough and careful investigation of the results of its use has justified us in organizing a company, with ample capital, to enlarge the field of its usefulness. This company will carry on their work on strictly business lines, in such a manner as to secure the support of the medical profession, but we believe there is a great army of men, and, alas! many women, who need to be rescued from the horrible bondage of alcohol and of drugs. Work for many of these must be largely philanthropic and charitable, and we desire to make it possible for every one, rich or poor, who needs the treatment we can give to secure it. Therefore, we invite you to unite with us in this work and to undertake the care, and in a large measure, the conduct of the charitable half of the enterprise."

The result of the meeting was the organization of the Women's National Auxiliary of the Oppenheimer Institute. The officers and members of the auxiliary are well known leaders of charitable work in New York.

It is the aim of the parent corporation and of the Women's National Auxiliary to make this movement world-wide. Local auxiliaries will be organized throughout the United States and in all foreign countries where institutes are established. The Women's National Auxiliary as the parent body will have legislative authority and administrative control over the local auxiliaries in the United States, each local auxiliary will have five or more members who will be represented by a delegate member of the national auxiliary. Local auxiliaries will be chartered from national auxiliary and will be the primary bodies through which individual cases will be helped. The plans for these local auxiliaries are so far reaching that they may be organized either out of or in connection with existing bodies or a local auxiliary may come into existence for the single purpose of helping even one case back to health and self respect.

It will be a part of the duty of members of these auxiliaries to be the friends of the men and women whom they have helped out of the slough of despond into a new life where noble manhood and womanhood once more becomes possible; to strengthen and encourage them as they arrive to take their place among men again and to cheer and brighten the homes that have been desolated.

The members of the Women's National Auxiliary of the Oppenheimer Institute have accepted the opportunity and responsibility that was offered them and they were of one mind in this effort to help the helpless and to bring hope to the hopeless. In this work they loyally offer their cooperation with other societies.

Institutes and auxiliaries are now being established in various parts of the country. For general information in regard to the institute, write or apply to the executive offices, No. 170 Broadway, New York. For information concerning the philanthropic and charitable work of the institute, apply to the Women's National Auxiliary, room 401, Fuller building, Fifth avenue, New York.

BRIEF MENTION.

He should die young who says he has neither erred, strayed, nor been deceived.—"Titian."

Expectation becomes realization in all cases of localized inflammation where antiphlogistine is applied.

The Lanikol Chemical Co., Milwaukee, Wis., will send you sample of lanikol free. It cures many skin diseases.

The special preparations of the Wheeler Chemical Works, of Chicago, are very reliable. Send for samples and literature.

The Stearns & White Co., of Chicago, makes a large line of standard pharmaceuticals. Drop a line for their new catalogue.

Chloropepsoid has established its value as a valuable therapeutic agent with thousands of the best practitioners. It is well worth trying.

The Chicago Pharmacal Co. makes an elegant line of preparations. Better send for their price list and investigate the value of their specialties.

Calicolo is doing some great things for doctors who are using it. Write the Butler Positive Treatment Co., San Diego, California, regarding it.

Antiphlogistine renders ready service to the patient and physician by promptness and positiveness of action.

Styptogenic crayons are very useful in many uterine disorders. The Styptogenic Mfg. Co., Rutherford, N. J., will send you samples and literature free.

Uriseptin is a urinary antiseptic which has thoroughly established its merits. It is used by leading clinicians. It will pay you to get a sample and try it.

The dry hone made by E. A. Harrington, Waukesha, Wis., is exactly as advertised. We use one frequently with good satisfaction. It keeps knives and razors sharp.

The Golden Cross Eye, Ear, Nose and Throat College and Clinic offers a correspondence course in optics. If you wish to take up refraction it will pay to write this school.

Chemical lymph cures many chronic conditions which yield to no other treatment. The advertisement of it in this number is worth reading. The people who make it are reliable.

Phenadul is one of the newer antiseptics of great value. It is germicidal and astringent. Send for free sample to the Andrew Chemical Co., Boston, and you will find it to be a valuable therapeutic agent.

The treatment of inflammation through the medium or antiphlogistine has the endorsement of every

active practitioner as the most approved method of curative procedure.

The Boston Electical Appliance Co., 318 Tremont St., Boston, manufactures a fine line of modern electrical appliances. If you are looking for up-to-date appliances send for their catalogue which shows good goods at the right prices.

Dr. Mann, of Evanston, Ill., in his advertisement in this issue, offers his valuable aphrodisiac mixture. The doctor makes a number of valuable special preparations. He will gladly give you information regarding them. They are all reliable products.

The Ideal Chemical Co,, of St. Paul, has issued a booklet on hernia which presents some facts regarding the cure of this conditon. Thousands of cases of hernia can be cured by the general practitioner if he will improve his opportunities. It will pay you to get this booklet and investigate the matter.

I have used sanmetto extensively in my practice for some years, and in well chosen cases have always gotten good results. I look upon it as a most valuable remedy in prostatitis, urethritis, cystitis, and in fact all inflammatory conditions of the genito-urinary tract.—W. J. Chittock, M. D., Jackson, Michigan.

Triacol is a great remedy in bronchial and lung troubles. Dr. E. E. Hall, of Chicago, says: I used triacol, Alpers, in a case of bronchial irritation with cough and dyspnea. I can best speak of its value in the patient's own words when I was called the second day. She said, "You are the best doctor I ever had. Your medicine acts so quick. I feel perfectly well."

I find aletris cordial, Rio, to be an excellent and palatable preparation. I have used it in cases of dysmenorrhea, irritable ovary, uterine congestion, leucorrhea and endometritis, with the best of results. In a case of irritable ovary that had resisted all treatment for four years, I prescribed aletris cordial, Rio, and after taking for four days the pain was entirely relieved.—T. R. Rice, M. D., Utica, Mo.

Dr. H. D. Wood, Minneapolis, Minn., reports very gratifying results in a case of locomotor ataxia of six years' standing. Patient gives a syphilitic history and presents all the classical symptoms of the disease. The Roberts-Hawley lymph compound special has been used three months with very decided benefit. All symptoms have been markedly improved. The vesicle incontinence, which had been a most annoying symptom, has entirely disappeared. Case still under treatment.

Suggestion for December is an interesting issue of this magazine of psychology. Some of the articles are: Auto-Suggestion for the Formation of Habits, by Hebert A. Parkyn, M. D.; The Illimitable Power of Mind, by Prof. Edgar L. Larkin; A New Study of the Brain, by Edward Hooker Dewey, M. D.; Steps in Attaining the Physicial Ideal, by Mary Frazee; The Law of Suggestion, by W. B. Featherstone, M. D.; By The Motions of Matter, by Franklin H. Heald. A sample copy may be obtained free by addressing Suggestion, 4074 Drexel Boulevard, Chicago, Ill.